

# **INTRODUCTION**



**(INVESTMENTS)**

## Meaning of Investments

Investment or investing means that an asset is bought, or that money is put into a bank to get a future interest from it. Investment is the total amount of money by a shareholder in buying shares of a company. In economic management science, investment means longer-term savings.

### Definition

- the action or process of investing money for profit.
- a thing that is worth buying because it may be profitable or useful in the future.
- an act of devoting time, effort, or energy to a particular undertaking with the expectation of a worthwhile result.

### Introduction to Investments

An investment is essentially an asset that is created with the intention of allowing money to grow. If investment is made in a return generating plan, the you will earn an income via accumulation of gains. Investment is the dedication of an asset to attain an increase in value over a period of time. Investment requires a sacrifice of some present asset, such as time, money, or effort.

In finance, the purpose of investing is to generate a return from the invested asset. The return may consist of a gain (profit) or a loss realized from the sale of a property or an investment, unrealized capital appreciation (or depreciation), or investment income such as dividends, interest or rental income, or a combination of capital gain and income. The return may also include currency gains or losses due to changes in the foreign currency exchange rate

Investors generally expect higher returns from riskier investments. When a low-risk investment is made, the return is also generally low. Similarly, high risk comes with a chance of high returns.

### History of Investments

The code of Hammurabi (around 1700 BC) provided a legal framework for investment, establishing a means for the pledge of collateral by codifying debtor and creditor rights in regard to pledged land. Punishments for breaking financial obligations were not as severe as those for crimes involving injury or death.

Amsterdam Stock Exchange is considered to be the world's oldest stock exchange. Established in 1602 by Dutch East India Company, the early 1900s, purchasers of stocks, bonds, and other securities were described in media, academia, and commerce as speculators.

Since the Wall Street crash of 1929, and particularly by the 1950s, the term investment had come to denote the more conservative end of the securities spectrum, while speculation was applied by financial brokers and their advertising agencies to higher risk securities much in vogue at that time. Since the last half of the 20th century, the terms speculation and speculator have specifically referred to higher risk ventures.

## Investment and risk

An investor may bear a risk of loss of some or all of their capital invested. Investment differs from arbitrage (is the practice of taking advantage of a difference in prices in 2 or more markets) in which profit is generated without investing capital or bearing risk.

In contrast with savings, investments tend to carry more risk, in the form of both a wider variety of risk factors and a greater level of uncertainty.

Even investing in tangible assets has its risk, and just like with most risk, property buyers can seek to mitigate any potential risk by taking out a mortgage and by borrowing at a lower loan to security ratio.

## Types of investment

1. Stock Market
2. Mutual Funds
3. Gold
4. Crypto Currency

### 1. Stock Market

#### Meaning

The stock market broadly refers to the collection of exchanges and other venues where the buying, selling, and issuance of shares of publicly held companies take place.



#### Introduction

A stock market, equity market or share market is the aggregation of buyers and sellers of stocks (also known as shares), which represent ownership claims in business; these may include securities listed on a public stock exchange, as well as stock that is only traded privately, such as private companies which are sold to investors through equity crowdfunding platforms. Investment in the stock market is most often done via stock brokers and electronic trading platforms. Investments are usually made with an investment strategy in mind.

## History of Stock Market

In 12th century France, the courtiers de change were concerned with managing and regulating the debts of agricultural communities on behalf of banks. Because these men also trade with debts, they could be called the first brokers.

The Italian historian Lodovico Guicciardini described how, in late 13th-century Bruges, commodity traders gathered outdoors at a market square containing an inn owned by a family called Van der Beurze, and in 1409 they became the "Brugse Beurse", institutionalizing what had been, until then, an informal meeting. The idea quickly spread around Flanders and neighbouring countries and "Beurzen" soon opened in Ghent and Rotterdam. International traders, and specially the Italian bankers, present in Bruges since the early 13th-century, took back the word in their countries to define the place for stock market exchange: first the Italians, but soon also the French, the Germans, Russians, Czechs, Swedes, Danes and Norwegians.

In most languages the word coincides with that for money bags, dating back to the Latin bursa, from which obviously also derives the name of the Van der Beurse family. In the middle of the 13th century, Venetian bankers began to trade in government securities. In 1351 the Venetian government outlawed spreading rumours intended to lower the price of government funds. Bankers in Pisa, Verona, Genoa and Florence also began trading in government securities during the 14th century.

This was only possible because these were independent city-states not ruled by a duke but a council of influential citizens. Italian companies were also the first to issue shares. Companies in England and the Low Countries followed in the 16th century. Around this time, a joint stock company one whose stock is owned jointly by the shareholders emerged and became important for colonization of what Europeans called the "New World".

The Dutch East India Company (founded in 1602) was the first joint stock company to get a fixed capital stock and as a result, continuous trade in company stock occurred on the Amsterdam Exchange. Soon thereafter, a lively trade in various derivatives, among which options and repos, emerged on the Amsterdam market. Dutch traders also pioneered short selling – a practice which was banned by the Dutch authorities as early as 1610.

There are now stock markets in virtually every developed and most developing economies, with the world's largest markets being in the United States, United Kingdom, Japan, India, China, Canada, Germany, France, South Korea and the Netherlands

## Function and purpose

The stock market is one of the most important ways for companies to raise money, along with debt markets which are generally more imposing but do not trade publicly. This allows businesses to be publicly traded, and raise additional financial capital for expansion by selling shares of ownership of the company in a public market. The liquidity that an exchange affords the investors enables their holders to quickly and easily sell securities. This is an attractive feature of investing in stocks, compared to other less liquid investments such as property and other immovable assets.

History has shown that the price of stocks and other assets is an important part of the dynamics of economic activity, and can influence or be an indicator of social mood. An economy where

the stock market is on the rise is considered to be an up-and-coming economy. The stock market is often considered the primary indicator of a country's economic strength and development.

Rising share prices, for instance, tend to be associated with increased business investment and vice versa. Share prices also affect the wealth of households and their consumption. Therefore, central banks tend to keep an eye on the control and behavior of the stock market and, in general, on the smooth operation of financial system functions. Financial stability is the *raison d'être* of central banks. Exchanges also act as the clearinghouse for each transaction, meaning that they collect and deliver the shares, and guarantee payment to the seller of a security. This eliminates the risk to an individual buyer or seller that the counterparty could default on the transaction.

The smooth functioning of all these activities facilitates economic growth in that lower costs and enterprise risks promote the production of goods and services as well as possibly employment. In this way the financial system is assumed to contribute to increased prosperity, although some controversy exists as to whether the optimal financial system is bank-based or market-based.

Recent events such as the Global Financial Crisis have prompted a heightened degree of scrutiny of the impact of the structure of stock markets (called market microstructure), in particular to the stability of the financial system and the transmission of systemic risk

## **Stock market index**

The movements of the prices in global, regional or local markets are captured in price indices called stock market indices, of which there are many, e.g., the S&P, the FTSE, the Euronext indices and the NIFTY & SENSEX of India. Such indices are usually market capitalization weighted, with the weights reflecting the contribution of the stock to the index. The constituents of the index are reviewed frequently to include/exclude stocks in order to reflect the changing business environment.

## **Indian Stock Market**

In India there are 2 Stock Exchanges namely; BSE (Bombay Stock Exchange) and NSE (National Stock Exchange).

### **Bombay stock Exchange (BSE)**





BSE Limited, also known as the Bombay Stock Exchange (BSE) is an Indian stock exchange located on Dalal Street in Mumbai. Established in 1875 by cotton merchant Premchand Roychand, a Rajasthani Jani Businessman, it is the oldest stock exchange of Asia, and also the tenth oldest in the World.

## **History of Bombay Stock Exchange**

Bombay Stock Exchange was started by Premchand Roychand in 1875. While BSE Limited is now synonymous with Dalal Street, it was not always so. In the 1850s, five stock

brokers gathered together under a Banyan tree in front of Mumbai Town Hall, where Horniman Circle is now situated. A decade later, the brokers moved their location to another leafy setting, this time under banyan trees at the junction of Meadows Street and what was then called Esplanade Road, now Mahatma Gandhi Road. With a rapid increase in the number of brokers, they had to shift places repeatedly. At last, in 1874, the brokers found a permanent location, the one that they could call their own. The brokers group became an official organization known as "The Native Share & Stock Brokers Association" in 1875.

The Bombay Stock Exchange continued to operate out of a building near Town Hall until 1928. The present site near Horniman Circle was acquired by the exchange in 1928, and a building was constructed and occupied in 1930. The street on which the site is located came to be called Dalal Street in Hindi (meaning "Broker Street") due to the location of the exchange. On 31 August 1957, the BSE became the first stock exchange to be recognized by the Indian Government under the Securities Contracts Regulation Act. Construction of the present building, the Phiroze Jeejeebhoy Towers at Dalal Street, Fort area, began in the late 1970s and was completed and occupied by the BSE in 1980. Initially named the BSE Towers, the name of the building was changed soon after occupation, in memory of Sir Phiroze Jamshedji Jeejeebhoy, chairman of the BSE since 1966, following his death.

In 1986, the BSE developed the S&P BSE SENSEX index, giving the BSE a means to measure the overall performance of the exchange. In 2000, the BSE used this index to open its derivatives market, trading S & P BSE SENSEX futures contracts. The development of S & P BSE SENSEX options along with equity derivatives followed in 2001 and 2002, expanding the BSE's trading platform.

Historically an open outcry floor trading exchange, the Bombay Stock Exchange switched to an electronic trading system developed by Cmc Ltd in 1995. It took the exchange only 50 days to make this transition. This automated, screen-based trading platform called BSE On-Line Trading (BOLT) had a capacity of 8 million orders per day. Now BSE has raised capital by issuing shares and as on 3 May 2017 the BSE share which is traded in NSE only closed with ₹999. The BSE is also a Partner Exchange of the United Nations Sustainable stock Exchange initiative, joining in September 2012. BSE established India INX on 30 December 2016. India INX is the first international exchange of India. BSE launches commodity derivatives contracts in gold and silver.

## National Stock Exchange (NSE)



National Stock Exchange of India Limited (NSE) is the leading stock exchange of India, located in Mumbai Maharashtra. It is under the ownership of some leading financial institutions, banks, and insurance companies. NSE was established in 1992 as the first dematerialized electronic exchange in the country. NSE was the first exchange in the country to provide a modern, fully automated screen-based electronic trading system that offered easy trading facilities to investors spread across the length and breadth of the country. Vikram Limaye is the Managing Director and Chief Executive Officer of NSE.

National Stock Exchange has a total market capitalization of more than US \$ 3.4 trillion, making it world's 10th largest stock exchange as of August 2021. NSE's flagship index, the NIFTY 50, a 50-stock index is used extensively by investors in India and around the world as a barometer of the Indian capital market. The Nifty 50 index was launched in 1996 by NSE. However, Vaidyanathan (2016) estimates that only about 4% of the Indian economy / GDP is actually derived from the stock exchanges in India.

Unlike countries like the United States where nearly 70% of the country's GDP is derived from large companies in the corporate sector, the corporate sector in India accounts for only 12-14% of the national GDP (as of October 2016). Of these only 7,400 companies are listed of which only 4000 trades on the stock exchanges at BSE and NSE. Hence the stocks trading at the BSE and NSE account for only around 4% of the Indian Economy, which derives most of its income-related activity from the so-called unorganized sector and household spending. Economic Times estimates that as of April 2018, 6 crore (60 million) retail investors had invested their savings in stocks in India, either through direct purchases of equities or through mutual funds. Earlier, the Bimal Jalan Committee report estimated that barely 1.3% of India's population invested in the stock market, as compared to 27% in the United States and 10% in China.

## History of National Stock Exchange

National Stock Exchange was incorporated in the year 1992 to bring about transparency in the Indian equity markets. Instead of trading memberships being confined to a group of brokers, NSE ensured that anyone who was qualified, experienced, and met the minimum financial requirements were allowed to trade. In this context, NSE was ahead of its time when it

separated ownership and management of the exchange under SEBI's supervision. Stock price information that could earlier be accessed only by a handful of people could now be seen by a client in a remote location with the same ease. The paper-based settlement was replaced by electronic depository-based accounts and settlement of trades was always done on time. One of the most critical changes involved a robust risk management system that was set in place, to ensure that settlement guarantees would protect investors against broker defaults.

NSE was set up by a group of leading Indian financial institutions at the behest of the Government of India to bring transparency to the Indian capital market. Based on the recommendations laid out by the Pherwani committee, NSE was established with a diversified shareholding comprising domestic and global investors. The key domestic investors include Life Insurance Corporation, State Bank of India, IFCI Limited, IDFC Limited and stock Holding Corporation of India Limited. Key global investors include Gail FDI Limited, GS Strategic Investments Limited, SAIF II SE Investments Mauritius Limited, Aranda Investments (Mauritius) Pte Limited, and PI Opportunities Fund I. The exchange was incorporated in 1992 as a tax-paying company and was recognized as a stock exchange in 1993 under the Securities Contracts (Regulation) Act, 1956, when P.V. Narasimha Rao was the Prime Minister of India and Manmohan Singh was the finance minister. NSE commenced operations in the Wholesale Debt Market (WDM) segment in June 1994. The capital market (equities) segment of the NSE commenced operations in November 1994, while operations in the derivatives segment commenced in June 2000.

NSE offers trading, clearing and settlement services in equity, equity derivative, debt, commodity derivatives, and currency derivatives segments. It was the first exchange in India to introduce an electronic trading facility thus connecting the investor base of the entire country. NSE has 2500 VSATs and 3000 leased lines spread over more than 2000 cities across India. NSE was also instrumental in creating the National Securities Depository Limited (NSDL) which allows investors to securely hold and transfer their shares and bonds electronically. It also allows investors to hold and trade in as few as one share or bond. This not only made holding financial instruments convenient but more importantly, eliminated the need for paper certificates and greatly reduced incidents involving forged or fake certificates and fraudulent transactions that had plagued the Indian stock market.

## 2. Mutual Funds





## Meaning

a mutual fund is a company that brings together money from many people and invests it in stocks, bonds or other assets. The combined holdings of stocks, bonds or other assets the fund owns are known as its portfolio.

## Introduction

A mutual fund is a professionally managed investment fund that pools money from many investors to purchase securities. The term is typically used in the United States, Canada, and India, while similar structures across the globe include the SICAV in Europe ('investment company with variable capital') and open-ended investment company (OEIC) in the UK.

Mutual funds are often classified by their principal investments: money market funds, bond or fixed income funds, stock or equity funds, or hybrid funds. Funds may also be categorized as index funds, which are passively managed funds that track the performance of an index, such as a stock market index or bond market index, or actively managed funds, which seek to outperform stock market indices but generally charge higher fees. Primary structures of mutual funds are open-end funds, closed-end funds, unit investment trusts.

Open-end funds are purchased from or sold to the issuer at the net asset value of each share as of the close of the trading day in which the order was placed, as long as the order was placed within a specified period before the close of trading. They can be traded directly with the issuer or via an electronic trading platform or stockbroker.

Mutual funds have advantages and disadvantages compared to direct investing in individual securities. The advantages of mutual funds include economies of scale, diversification, liquidity, and professional management. However, these come with mutual fund fees and expenses.

Mutual funds are regulated by governmental bodies and are required to publish information including performance, comparison of performance to benchmarks, fees charged, and securities held. A single mutual fund may have several share classes by which larger investors pay lower fees.

Hedge funds and exchange-traded funds are not mutual funds.

## History of Mutual Funds

The first modern investment funds, the precursor of mutual funds, were established in the Dutch Republic. In response to the Crisis of 1772, Amsterdam-based businessman Abraham van Ketwich formed a trust named Eendragt Maakt Magt ("unity creates strength"). His aim was to provide small investors with an opportunity to diversify.

Mutual funds were introduced to the United States in the 1890s. Early U.S. funds were generally closed-end funds with a fixed number of shares that often traded at prices above the portfolio net asset value. The first open-end mutual fund with redeemable shares was established on March 21, 1924, as the Massachusetts Investors Trust, which still in existence today and managed by MFS Investment Management.

In the United States, closed-end funds remained more popular than open-end funds throughout the 1920s. In 1929, open-end funds accounted for only 5% of the industry's \$27 billion in total assets. After the Wall Street Crash of 1929, the United States Congress passed a series of acts regulating the securities markets in general and mutual funds in particular.

- The Securities Act of 1933 requires that all investments sold to the public, including mutual funds, be registered with the SEC and that they provide prospective investors with a prospectus that discloses essential facts about the investment.
- The Securities and Exchange Act of 1934 requires that issuers of securities, including mutual funds, report regularly to their investors. This act also created the Securities and Exchange Commission, which is the principal regulator of mutual funds.
- The Revenue Act of 1936 established guidelines for the taxation of mutual funds. It allowed mutual funds to be treated as a flow-through or pass-through entity, where income is passed through to investors who are responsible for the tax on that income.
- The Investment Company Act of 1940 established rules specifically governing mutual funds.

These new regulations encouraged the development of open-end mutual funds (as opposed to closed-end funds).

Growth in the U.S. mutual fund industry remained limited until the 1950s when confidence in the stock market returned. In the 1960s, Fidelity Investments began marketing mutual funds to the public, rather than only wealthier individuals or those working in the finance industry. The introduction of money market funds in the high-interest rate environment of the late 1970s boosted industry growth dramatically.

The first retail index fund, First Index Investment Trust, was formed in 1976 by The Vanguard Group, headed by John Bogle; it is now called the "Vanguard 500 Index Fund" and is one of the largest mutual funds.

Beginning the 1980s, the mutual fund industry began a period of growth. According to Robert Pozen and Theresa Hamacher, growth was the result of three factors:

1. A bull market for both stocks and bonds,
2. New product introductions (including funds based on municipal bonds, various industry sectors, international funds, and target date funds) and
3. Wider distribution of fund shares. Among the new distribution channels were retirement plans. Mutual funds are now a preferred investment option in certain types of retirement plans, specifically in 401(k), other defined contribution plans and in individual retirement accounts (IRAs), all of which surged in popularity in the 1980s.

The 2003 mutual fund scandal involved unequal treatment of fund shareholders whereby some fund management companies allowed favored investors to engage in prohibited late trading or market timing. The scandal was uncovered by former New York Attorney General Eliot Spitzer and led to an increase in regulation.

In a 2007 study about German mutual funds, Johannes Gomolka and Ralf Jasny found statistical evidence of illegal time zone arbitrage in trading of German mutual funds. Though reported to regulators, BaFin never commented on these results.

## Advantages of Mutual Funds

- Increased opportunity for diversification: A fund diversifies by holding many securities. This diversification decreases risk.
- Daily liquidity: In the United States, mutual fund shares can be redeemed for their net asset value within seven days, but in practice the redemption is often much quicker. This liquidity can create asset–liability mismatch which poses challenges, which in part motivated an SEC liquidity management rule in 2016.
- Professional investment management: Open-and closed-end funds hire portfolio managers to supervise the fund's investments.
- Ability to participate in investments that may be available only to larger investors. For example, individual investors often find it difficult to invest directly in foreign markets.
- Service and convenience: Funds often provide services such as check writing.
- Government oversight: Mutual funds are regulated by a governmental body
- Transparency and ease of comparison: All mutual funds are required to report the same information to investors, which makes them easier to compare to each other.

## Disadvantages of Mutual Funds

Mutual funds have disadvantages as well, which include:

- Fees
- Less control over the timing of recognition of gains
- Less predictable income
- No opportunity to customize

## Fund structure

There are three primary structures of mutual funds: open-end funds, unit investment trusts, and closed-end funds. Exchange-traded funds (ETFs) are open-end funds or unit investment trusts that trade on an exchange.

### (a) Open end funds

Open-end mutual funds must be willing to buy back ("redeem") their shares from their investors at the net asset value (NAV) computed that day based upon the prices of the securities owned by the fund. In the United States, open-end funds must be willing to buy back shares at the end of every business day. In other jurisdictions, open-end funds may only be required to buy back shares at longer intervals. For example, UCITS funds in Europe are only required to accept redemptions twice each month (though most UCITS accept redemptions daily).

Most open-end funds also sell shares to the public every business day; these shares are priced at NAV. Open-end funds are often referred to simply as "mutual funds".

### **(b) Unit investment trust**

Unit investment trusts (UITs) are issued to the public only once when they are created. UITs generally have a limited life span, established at creation. Investors can redeem shares directly with the fund at any time (similar to an open-end fund) or wait to redeem them upon the trust's termination. Less commonly, they can sell their shares in the open market.

Unlike other types of mutual funds, unit investment trusts do not have a professional investment manager. Their portfolio of securities was established at the creation of the UIT.

### **(c) Close ended fund**

Closed-end funds generally issue shares to the public only once, when they are created through an initial public offering. Their shares are then listed for trading on a stock exchange. Investors who want to sell their shares must sell their shares to another investor in the market; they cannot sell their shares back to the fund. The price that investors receive for their shares may be significantly different from NAV; it may be at a "premium" to NAV (i.e., higher than NAV) or, more commonly, at a "discount" to NAV (i.e., lower than NAV).

## **3. Gold**



### **Meaning**

Gold is a soft, dense, yellow metal. It is a chemical element. Its chemical symbol is Au. ... As a precious metal, it has been used for many thousands of years by people all over the world, for jewelry, and as money. Gold is important because it is rare, but also easier to use than other rare metals. Gold is a soft, dense, yellow metal. It is a chemical element. Its chemical symbol is Au. ... As a precious metal, it has been used for many thousands of years by people all over the world, for jewelry, and as money. Gold is important because it is rare, but also easier to use than other rare metals.

## Introduction

Gold is a chemical element with the symbol Au (from Latin: aurum) and atomic number 79, making it one of the higher atomic number elements that occur naturally. In a pure form, it is a bright, slightly reddish yellow, dense, soft, malleable, and ductile metal. Chemically, gold is a transition metal and a group 11 element. It is one of the least reactive chemical elements and is solid under standard conditions. Gold often occurs in free elemental (native) form, as nuggets or grains, in rocks, in veins, and in alluvial deposits. It occurs in a solid solution series with the native element silver (as electrum), naturally alloyed with other metals like copper and palladium and also as mineral inclusions such as within pyrite. Less commonly, it occurs in minerals as gold compounds, often with tellurium (gold tellurides).

Gold is resistant to most acids, though it does dissolve in aqua regia (a mixture of nitric acid and hydrochloric acid), which forms a soluble tetrachloroaurate anion. Gold is insoluble in nitric acid, which dissolves silver and base metals, a property that has long been used to refine gold and to confirm the presence of gold in metallic substances, giving rise to the term acid test. Gold also dissolves in alkaline solutions of cyanide, which are used in mining and electroplating. Gold dissolves in mercury, forming amalgam alloys, and as the gold acts simply as a solute this is not a chemical reaction.

A relatively rare element, gold is a precious metal that has been used for coinage, jewelry, and other arts throughout recorded history. In the past, a gold standard was often implemented as a monetary policy, but gold coins ceased to be minted as a circulating currency in the 1930s, and the world gold standard was abandoned for a fiat currency system after 1971.

A total of around 201,296 tons of gold exists above ground, as of 2020. This is equal to a cube with each side measuring roughly 21.7 meters (71 ft). The world consumption of new gold produced is about 50% in jewelry, 40% in investments, and 10% in industry. Gold's high malleability, ductility, resistance to corrosion and most other chemical reactions, and conductivity of electricity have led to its continued use in corrosion resistant electrical connectors in all types of computerized devices (its chief industrial use). Gold is also used in infrared shielding, colored-glass production, gold leafing, and tooth restoration. Certain gold salts are still used as anti-inflammatories in medicine. As of 2017, the world's largest gold producer by far was China with 440 tons per year.

## History of Gold

The earliest recorded metal employed by humans appears to be gold, which can be found free or "native". Small amounts of natural gold have been found in Spanish caves used during the late Paleolithic period, c. 40,000 BC.

The oldest gold artifacts in the world are from Bulgaria and are dating back to the 5th millennium BC (4,600 BC to 4,200 BC), such as those found in the Varna Necropolis near Lake Varna and the Black Sea coast, thought to be the earliest "well-dated" find of gold artifacts in history. (La Niece 2009) Several prehistoric Bulgarian finds are considered no less old – the golden treasures of Hotnitsa, Durankulak, artifacts from the Kurgan settlement of Yunatsite near Pazardzhik, the golden treasure Sakar, as well as beads and gold jewelry found in the Kurgan settlement of Provadia – Solnitsata ("salt pit"). However, Varna gold is most often called the oldest since this treasure is the largest and most diverse.



Gold artifacts probably made their first appearance in Ancient Egypt at the very beginning of the predynastic period, at the end of the fifth millennium BC and the start of the fourth, and smelting was developed during the course of the 4th millennium; gold artifacts appear in the archeology of Lower Mesopotamia during the early 4th millennium. As of 1990, gold artifacts found at the Wadi Qana cave cemetery of the 4th millennium BC in the West Bank were the earliest from the Levant. Gold artifacts such as the golden hats and the Nebra disk appeared in Central Europe from the 2nd millennium BC Bronze Age.

The oldest known map of a gold mine was drawn in the 19th Dynasty of Ancient Egypt (1320–1200 BC), whereas the first written reference to gold was recorded in the 12th Dynasty around 1900 BC. Egyptian hieroglyphs from as early as 2600 BC describe gold, which King Tushratta of the Mitanni claimed was "more plentiful than dirt" in Egypt. Egypt and especially Nubia had the resources to make them major gold-producing areas for much of history. One of the earliest known maps, known as the Turin Papyrus Map, shows the plan of a gold mine in Nubia together with indications of the local geology. The primitive working methods are described by both Strabo and Diodorus Siculus, and included fire-setting. Large mines were also present across the Red Sea in what is now Saudi Arabia.

Gold is mentioned frequently in the Old Testament, starting with Genesis 2:11 (at Havilah), the story of the golden calf, and many parts of the temple including the Menorah and the golden altar. In the New Testament, it is included with the gifts of the magi in the first chapters of Matthew. The Book of Revelation 21:21 describes the city of New Jerusalem as having streets "made of pure gold, clear as crystal". Exploitation of gold in the south-east corner of the Black Sea is said to date from the time of Midas, and this gold was important in the establishment of what is probably the world's earliest coinage in Lydia around 610 BC. The legend of the golden fleece dating from the eighth century BCE may refer to the use of fleeces to trap gold dust from placer deposits in the ancient world. From the 6th or 5th century BC, the Chu (state) circulated the Ying Yuan, one kind of square gold coin.

In Roman metallurgy, new methods for extracting gold on a large scale were developed by introducing hydraulic mining methods, especially in Hispania from 25 BC onwards and in Dacia from 106 AD onwards. One of their largest mines was at Las Medulas in León, where seven long aqueducts enabled them to sluice most of a large alluvial deposit. The mines at Roșia Montană in Transylvania were also very large, and until very recently, still mined by opencast methods. They also exploited smaller deposits in Britain, such as placer and hard-rock deposits at Dolaucothi. The various methods they used are well described by Pliny the Elder in his encyclopedia *Naturalis Historia* written towards the end of the first century AD.

During Mansa Musa's (ruler of the Mali Empire from 1312 to 1337) hajj to Mecca in 1324, he passed through Cairo in July 1324, and was reportedly accompanied by a camel train that included thousands of people and nearly a hundred camels where he gave away so much gold that it depressed the price in Egypt for over a decade, causing high inflation. A contemporary Arab historian remarked:

The European exploration of the Americas was fueled in no small part by reports of the gold ornaments displayed in great profusion by Native American peoples, especially in Mesoamerica, Peru, Ecuador and Colombia. The Aztecs regarded gold as the product of the gods, calling it literally "god excrement" (*teocuitlatl* in Nahuatl), and after Moctezuma II was killed, most of this gold was shipped to Spain. However, for the indigenous peoples of North

America gold was considered useless and they saw much greater value in other minerals which were directly related to their utility, such as obsidian, flint, and slate. El Dorado is applied to a legendary story in which precious stones were found in fabulous abundance along with gold coins. The concept of El Dorado underwent several transformations, and eventually accounts of the previous myth were also combined with those of a legendary lost city. El Dorado, was the term used by the Spanish Empire to describe a mythical tribal chief (zipa) of the Muisca native people in Colombia, who, as an initiation rite, covered himself with gold dust and submerged in Lake Guatavita. The legends surrounding El Dorado changed over time, as it went from being a man, to a city, to a kingdom, and then finally to an empire.

The top prize at the Olympic Games and many other sports competitions is the gold medal. 75% of the presently accounted for gold has been extracted since 1910, two-thirds since 1950.

One main goal of the alchemists was to produce gold from other substances, such as lead — presumably by the interaction with a mythical substance called the philosopher's stone. Trying to produce gold led the alchemists to systematically find out what can be done with substances, and this laid the foundation for today's chemistry, which can produce gold (albeit uneconomically) by using nuclear transmutation. Their symbol for gold was the circle with a point at its center, which was also the astrological symbol and the ancient Chinese character for the Sun.

The Dome of the Rock is covered with an ultra-thin golden glass. The Sikh Golden temple, the Harmandir Sahib, is a building covered with gold. Similarly, the Wat Phra Kaew emerald Buddhist temple (wat) in Thailand has ornamental gold-leafed statues and roofs. Some European king and queen's crowns were made of gold, and gold was used for the bridal crown since antiquity. An ancient Talmudic text circa 100 AD describes Rachel, wife of Rabbi Akiva, receiving a "Jerusalem of Gold" (diadem). A Greek burial crown made of gold was found in a grave circa 370 BC.

#### **4. Crypto Currency**



#### **Meaning**

A cryptocurrency is a digital or virtual currency that is secured by cryptography, which makes it nearly impossible to counterfeit or double-spend.

## Introduction

A cryptocurrency, crypto-currency, or crypto is a collection of binary data which is designed to work as a medium of exchange. Individual coin ownership records are stored in a ledger, which is a computerized database using strong cryptography to secure transaction records, to control the creation of additional coins, and to verify the transfer of coin ownership. Cryptocurrencies are generally fiat currencies, as they are not backed by or convertible into a commodity. Some crypto schemes use validators to maintain the cryptocurrency. In a proof-of-stake model, owners put up their tokens as collateral. In return, they get authority over the token in proportion to the amount they stake. Generally, these token stakers get additional ownership in the token over time via network fees, newly minted tokens or other such reward mechanisms.

Cryptocurrency does not exist in physical form (like paper money) and is typically not issued by a central authority. Cryptocurrencies typically use decentralized control as opposed to a central bank digital currency (CBDC). When a cryptocurrency is minted or created prior to issuance or issued by a single issuer, it is generally considered centralized. When implemented with decentralized control, each cryptocurrency works through distributed ledger technology, typically a blockchain, that serves as a public financial transaction database.

A cryptocurrency is a tradable digital asset or digital form of money, built on blockchain technology that only exists online. Cryptocurrencies use encryption to authenticate and protect transactions, hence their name. There are currently over a thousand different cryptocurrencies in the world, and many see them as the key to a fairer future economy.

Bitcoin, first released as open-source software in 2009, is the first decentralized cryptocurrency. Since the release of bitcoin, many other cryptocurrencies have been created

## History of Crypto Currency

In 1983, the American cryptographer David Chaum conceived an anonymous cryptographic electronic money called e-cash. Later, in 1995, he implemented it through Digi cash, an early form of cryptographic electronic payments which required user software in order to withdraw notes from a bank and designate specific encrypted keys before it can be sent to a recipient. This allowed the digital currency to be untraceable by the issuing bank, the government, or any third party.

In 1998, Wei Dai published a description of "b-money", characterized as an anonymous, distributed electronic cash system. Shortly thereafter, Nick Szabo described bit gold. Like bitcoin and other cryptocurrencies that would follow it, bit gold (not to be confused with the later gold-based exchange, Bit Gold) was described as an electronic currency system which required users to complete a proof of work function with solutions being cryptographically put together and published.

In 2009, the first decentralized cryptocurrency, bitcoin, was created by presumably pseudonymous developer Satoshi Nakamoto. It used SHA-256, a cryptographic hash function, in its proof-of-work scheme. In April 2011, Name coin was created as an attempt at forming a decentralized DNS, which would make internet censorship very difficult. Soon after, in

October 2011, Litecoin was released. It used script as its hash function instead of SHA-256. Another notable cryptocurrency, Peercoin, used a proof-of-work/proof-of-stake hybrid.

On 6 August 2014, the UK announced its Treasury had commissioned a study of cryptocurrencies, and what role, if any, they could play in the UK economy. The study was also to report on whether regulation should be considered. Its final report was published in 2018, and it issued a consultation on crypto assets and stable coins in January 2021.

In June 2021, El Salvador became the first country to accept Bitcoin as legal tender, after the Legislative Assembly had voted 62–22 to pass a bill submitted by President Nayib Bukele classifying the cryptocurrency as such.

In August 2021, Cuba followed with Resolution 215 to accept Bitcoin as legal tender, which will circumvent U.S. sanctions.

In September 2021, the government of China, the single largest market for cryptocurrency, declared all cryptocurrency transactions illegal, completing a crackdown on cryptocurrency that had previously banned the operation of intermediaries and miners within China.

# Blockchain

The validity of each cryptocurrency's coins is provided by a blockchain. A blockchain is a continuously growing list of records, called blocks, which are linked and secured using cryptography. Each block typically contains a hash pointer as a link to a previous block, a timestamp and transaction data. By design, blockchains are inherently resistant to modification of the data. It is "an open, distributed ledger that can record transactions between two parties efficiently and in a verifiable and permanent way". For use as a distributed ledger, a blockchain is typically managed by a peer-to-peer network collectively adhering to a protocol for validating new blocks. Once recorded, the data in any given block cannot be altered retroactively without the alteration of all subsequent blocks, which requires collusion of the network majority.

Blockchains are secure by design and are an example of a distributed computing system with high Byzantine fault tolerance. Decentralized consensus has therefore been achieved with a blockchain



## **Wallets**

A cryptocurrency wallet stores the public and private "keys" (address) or seed which can be used to receive or spend the cryptocurrency. With the private key, it is possible to write in the public ledger, effectively spending the associated cryptocurrency. With the public key, it is possible for others to send currency to the wallet.

There exist multiple methods of storing keys or seed in a wallet from using paper wallets which are traditional public, private or seed keys written on paper to using hardware wallets which are dedicated hardware to securely store your wallet information, using a digital wallet which is a computer with a software hosting your wallet information, hosting your wallet using an exchange where cryptocurrency is traded. or by storing your wallet information on a digital medium such as plaintext.

## **Famous investors**

Investors famous for their success include Warren Buffett. In the March 2013 edition of Forbes magazines, Warren Buffett ranked number 2 in their Forbes 400 list. Buffett has advised in numerous articles and interviews that a good investment strategy is long-term and due diligence is the key to investing in the right assets.

Edward O. Thorp was a highly successful hedge fund manager in the 1970s and 1980s who spoke of a similar approach. The invest principles of both these investors have points in common with the Kelly criterion for money management. Numerous interactive calculators which use the Kelly criterion can be found online.



## **Chapter - 2**



**(DESIGN OF THE STUDY)**

## **Title of the project**

A study on customer's perspective on the arena of investments

## **Objectives**

- To examine the factor influencing customers/investors to invest in stock market, mutual funds, gold, crypto currency.
- To study the customers/investors perspective towards investments.

## **Scope of the study**

- The study is confined to four investment domains.
- The study includes the trend, perception and satisfaction of investments.

## **Purpose of the study**

- The purpose of the study is to analyze the factor influencing investors towards investments
- To study the perspective of investors towards investments
- To study the present investors perspective
- To understand the dependency and satisfaction on investments

## **Methodology of study**

The study is mainly based on descriptive study. The methodology involves collection of data directly from the field (primary data). The data collected is subjected to analysis using necessary tools that are relevant.

## **Source of data**

### **Primary data:**

It is collected for the first time; it is collected through questionnaires from investors.

## **Statistical tools**

- SPSS
- MS Excel
- Gretl

## **Limitation of the study**

Study is confined to only the investment perspective of investors who trade or invest on a regular basis and who are aware of the risk, terms and conditions of the domains of investments. The study is also limited to investors who have invested in different domains by individuals' choice; Gold, Mutual Funds, Stock Market and Crypto Currency respectively.

## **Chapter scheme:**

### **Chapter 1 - Introduction**

This chapter contains the meaning, introduction and history of investments, stock market, mutual funds and crypto currency.

### **Chapter 2 – Research design**

This chapter contains the meaning and introduction of Research design, Title of the project, Objectives of the study, Scope of the study, Purpose of the study, Methodology of the study, Source of data, Statistical tool, Limitations of the study.

### **Chapter 3 – Data Analysis**

This chapter contains the responses of respondents with percentage, graph and summary statistics of their age, gender, awareness of the domains of investments, knowledge in investments, preferred investment, dependency in investments, how frequent they invest, time period preferred, satisfaction, factors considered, objective of investment, perspective towards investments, expected returns, investment ratio, investment advisor, sectors, loss bearing capacity.

### **Chapter 4- Findings, Suggestions and Conclusions**

This chapter contains the analysis of investors expected rate of growth in investments with Age, Analysis of investors expected rate of growth in investments with Gender, Analysis of investors who could tolerate greatest loss over a single twelve-month period with Age, Analysis of investors who could tolerate greatest loss over a single twelve-month period with Gender, Analysis of investors most preferred investment with time period preferred for investments by investors.

## Chapter - 3

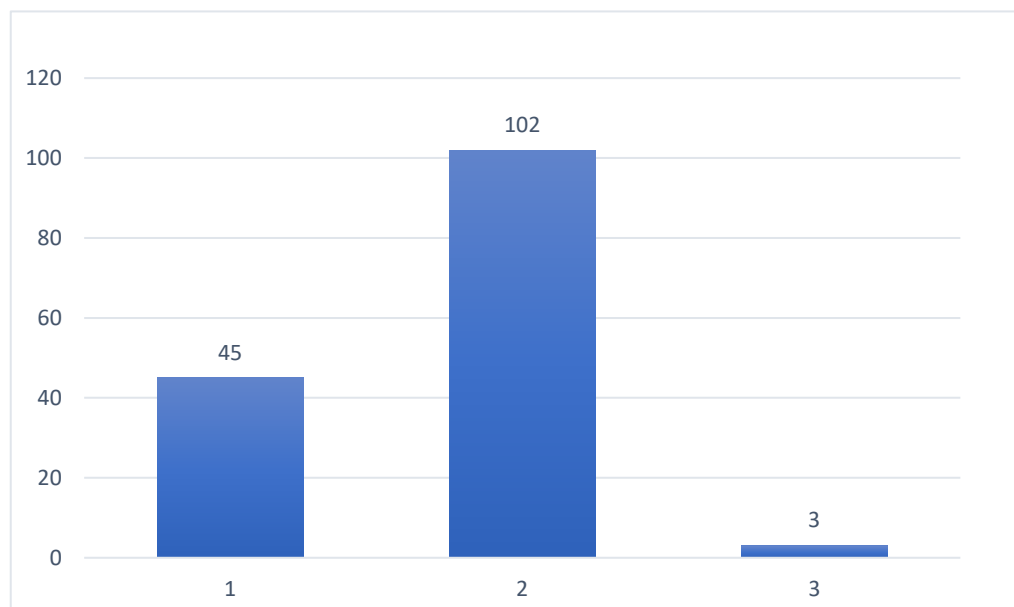


**(Data Analysis)**

**Table 3.1 Age group of the respondents who make investment.**

<b>Particulars</b>	<b>Number of respondents</b>	<b>Percentage</b>
Below 20	102	68
20- 40	45	30
40- 60	3	2
<b>Total</b>	<b>150</b>	<b>100</b>

**Graph 3.1 Age of the respondents who make investments.**

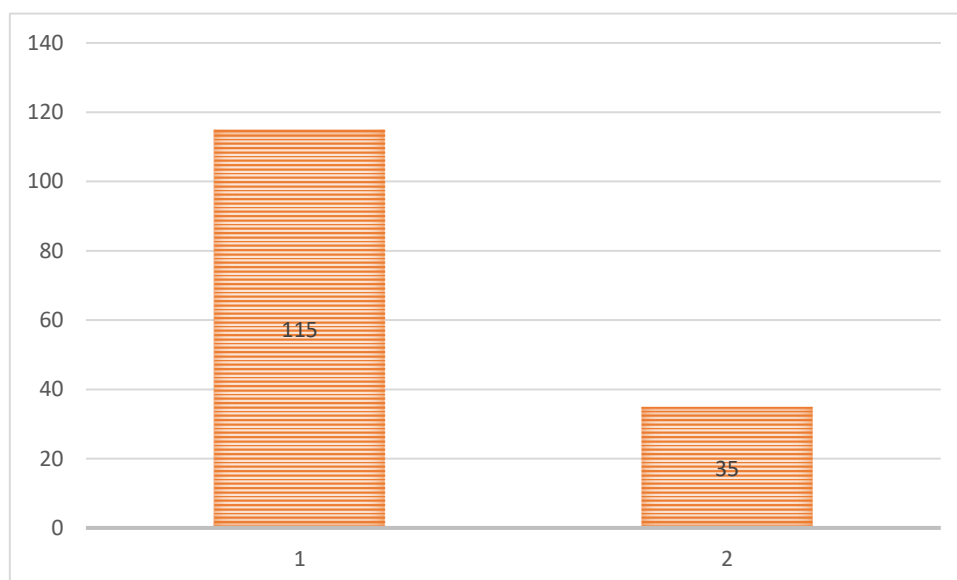




**Table 3.2 Gender of respondents who make investments.**

<b>Particulars</b>	<b>Number of respondents</b>	<b>Percentage</b>
Female	115	76.66
Male	35	23.33
<b>Total</b>	<b>150</b>	<b>100</b>

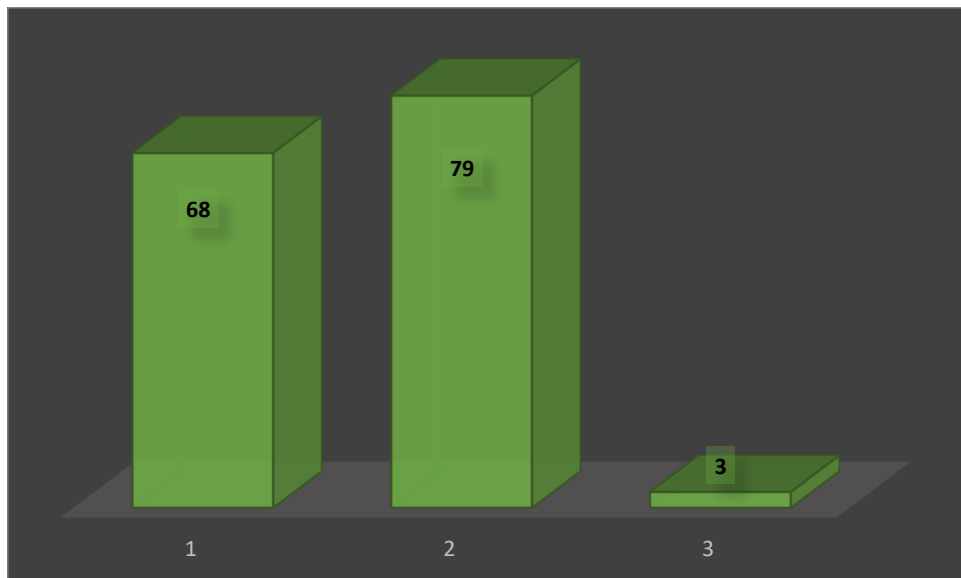
**Graph 3.2 Gender of respondents who make investments.**



**Table 3.3 Awareness about different domains who Invest.**

<b>Particulars</b>	<b>Number of respondents</b>	<b>Percentage</b>
Yes	68	45.33
No	79	52.66
Not sure	3	2
<b>Total</b>	<b>150</b>	<b>100</b>

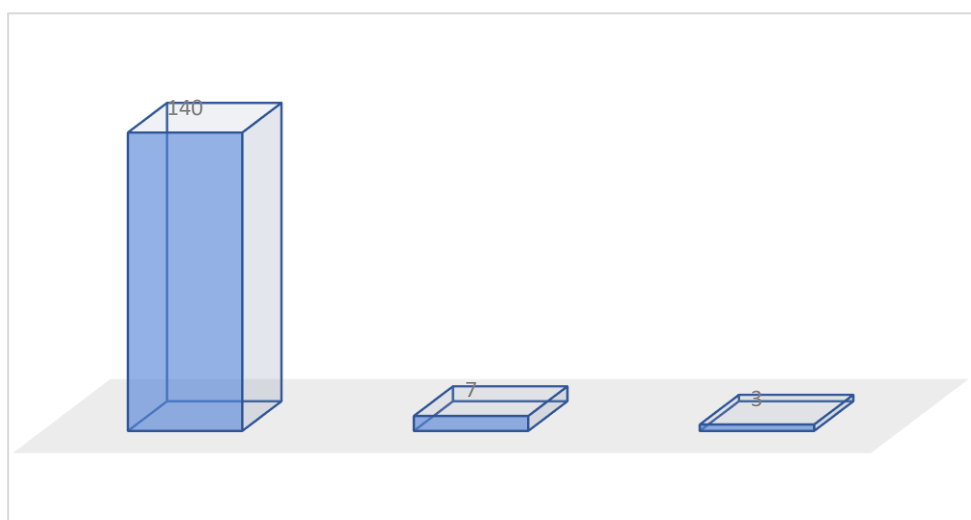
**Graph 3.3 Awareness about different domains who Invest.**



**Table 3.4 Knowledge of investors towards Investments.**

Particulars	Number of respondents	Percentage
Beginner	140	93.33
Experienced	7	4.66
Professional	3	2
<b>Total</b>	<b>150</b>	<b>100</b>

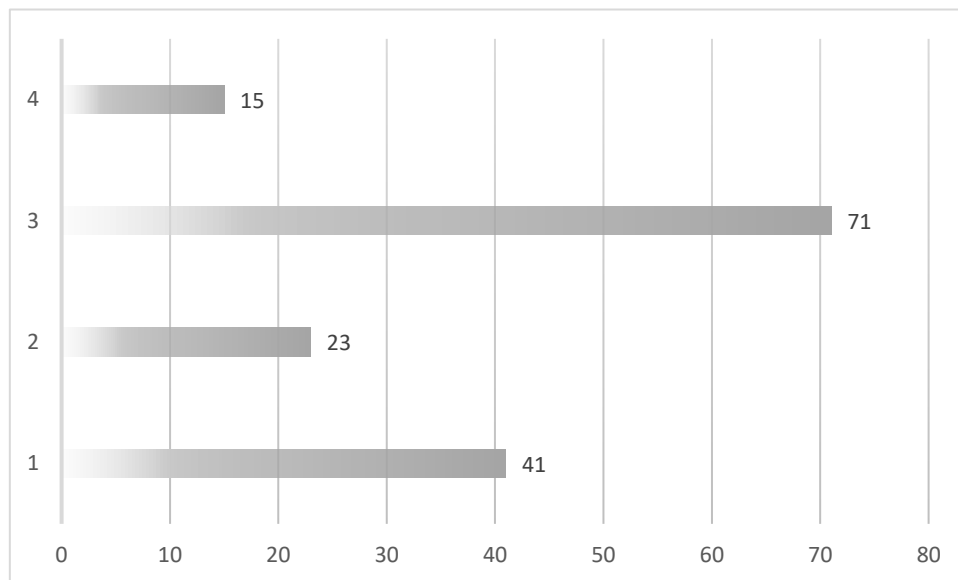
**Graph 3.4 Knowledge of investors towards Investments.**



**Table 3.5 Most preferred Investment by investors.**

Particulars	Number of respondents	Percentage
Gold	41	27.33
Mutual fund	23	15.33
Stock Market	71	47.33
Crypto Currency	15	10
<b>Total</b>	<b>150</b>	<b>100</b>

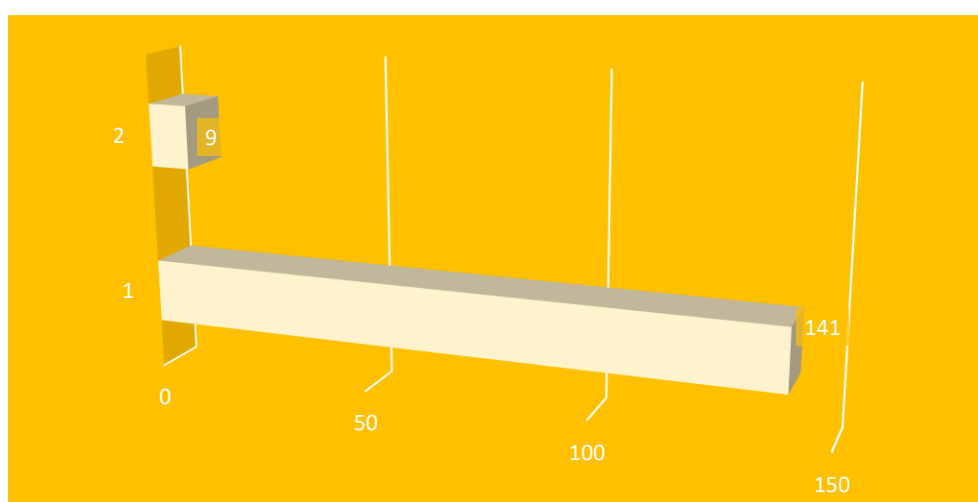
**Graph 3.5 Most preferred Investment by investors.**



**Table 3.6 Dependency of investors on Investments.**

<b>Particulars</b>	<b>Number of respondents</b>	<b>Percentage</b>
Part time	141	94
Full time	9	6
<b>Total</b>	<b>150</b>	<b>100</b>

**Graph 3.6 Dependency of investors on Investments.**

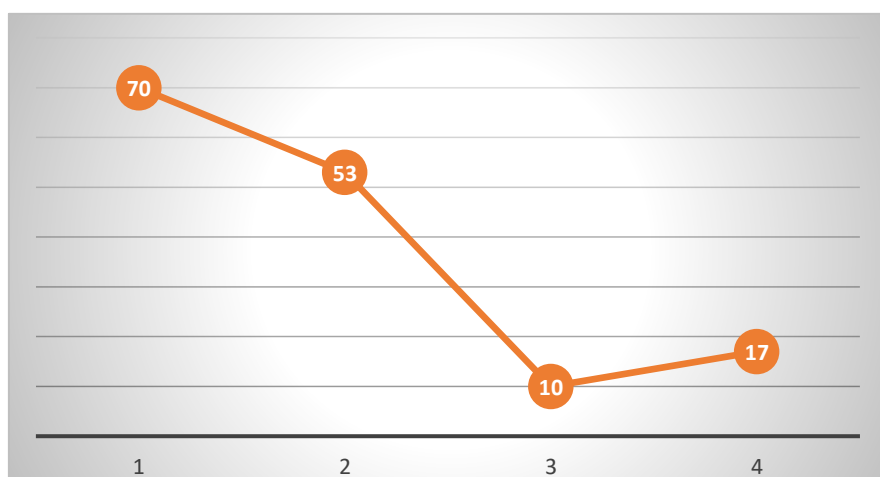




**Table 3.7 How frequent investors Invest.**

<b>Particulars</b>	<b>Number of respondents</b>	<b>Percentage</b>
Year	70	46.66
Monthly	53	35.33
Weekly	10	6.66
Daily	17	11.33
<b>Total</b>	<b>150</b>	<b>100</b>

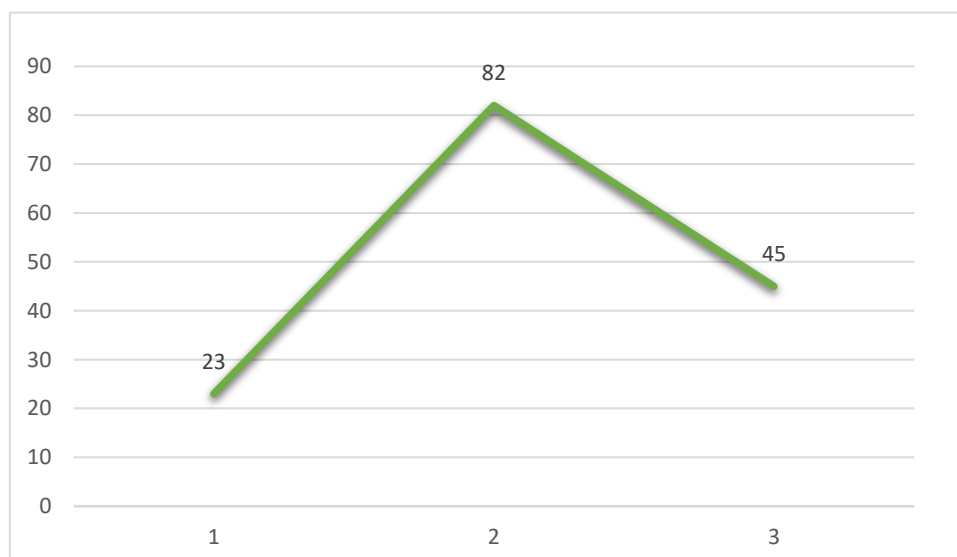
**Graph 3.7 How frequent investors Invest.**



**Table 3.8 Time period investors prefer to Invest.**

Particulars	Number of respondents	Percentage
Long term	23	15.33
Short	82	54.66
Medium	45	30
<b>Total</b>	<b>150</b>	<b>100</b>

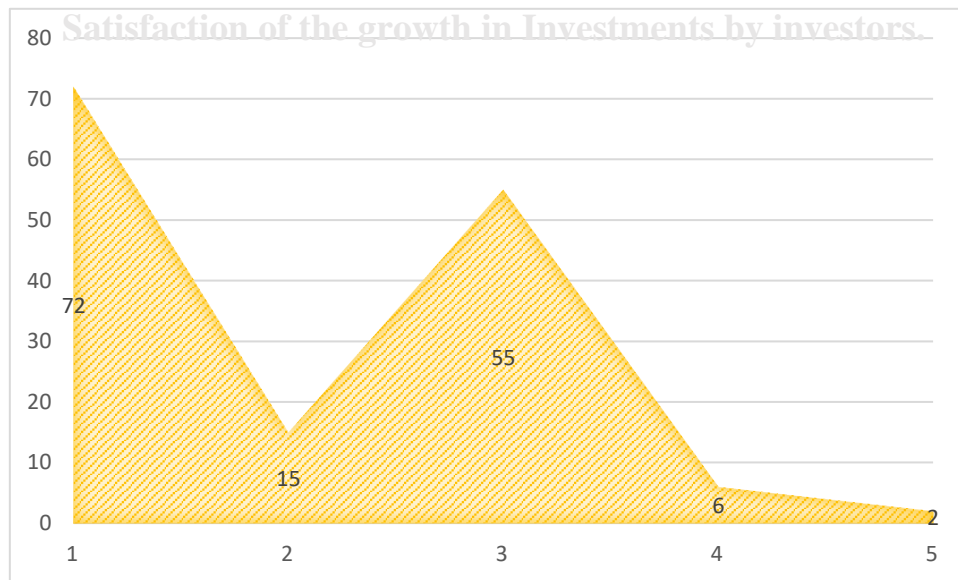
**Graph3.8 Time period investors prefer to Invest.**



**Table 3.9 Satisfaction of the growth in Investments by investors.**

<b>Particulars</b>	<b>Number of respondents</b>	<b>Percentage</b>
Neutral	76	50.66
Strongly satisfied	15	10
Satisfied	3	2
Strongly dissatisfied	5	3.33
Dissatisfied	51	34
<b>Total</b>	<b>150</b>	<b>100</b>

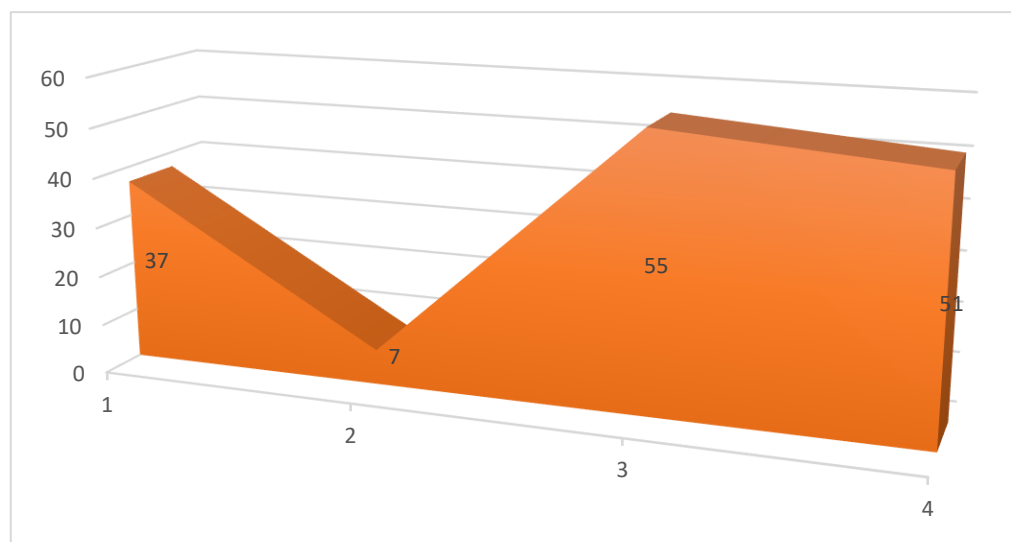
**Graph 3.9 Satisfaction of the growth in Investments by investors.**



**Table 3.10 Factors considered by investors before Investing.**

Particulars	Number of respondents	Percentage
high return	37	24.66
maturity period	7	4.66
low risk	55	36.66
safety of principal	51	34
Total	150	100

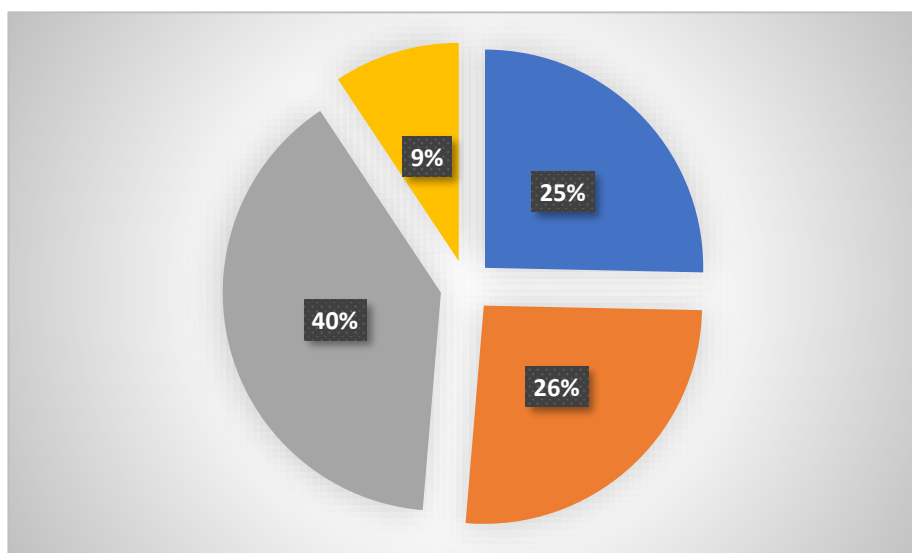
**Graph 3.10 Factors considered by investors before Investing.**



**Table 3.11 Investment Objective of investors who Invest.**

Particulars	Number of respondents	Percentage
Wealth creation	38	25.33
Future expenses	39	26
Earn return	59	39.33
Tax saving	14	9.33
Total	150	100

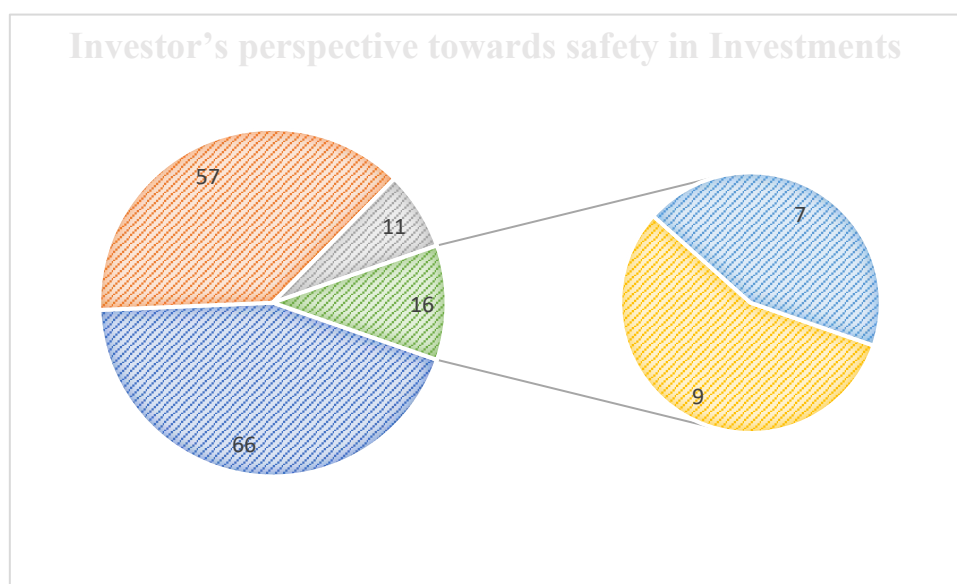
**Graph 3.11 Investment Objective of investors who Invest.**



**Table 4.12 Investor's perspective towards safety in Investments**

Particulars	Number of respondents	Percentage
Agree	49	32.66
Neutral	74	49.33
Strongly disagree	11	7.33
Disagree	9	6
Strongly agree	7	4.66
Total	150	100

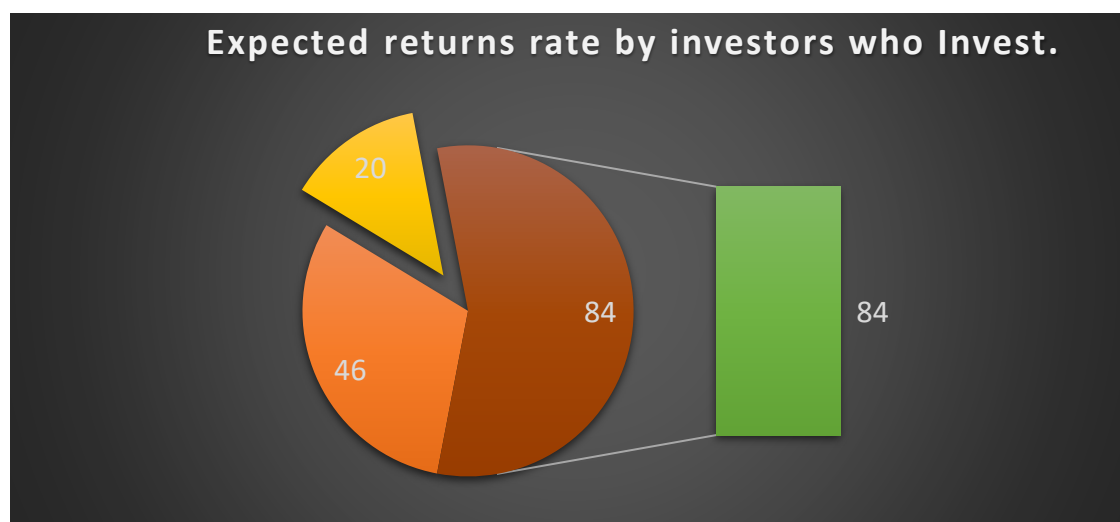
**Graph 4.12 Investor's perspective towards safety in Investments**



**Table 3.13 Expected returns rate by investors who Invest.**

<b>Particulars</b>	<b>Number of respondents</b>	<b>Percentage</b>
Steadily	46	30.66
Fast	20	13.33
At an average rate	84	56
Total	150	100

**Graph 3.13 Expected returns rate by investors who Invest.**

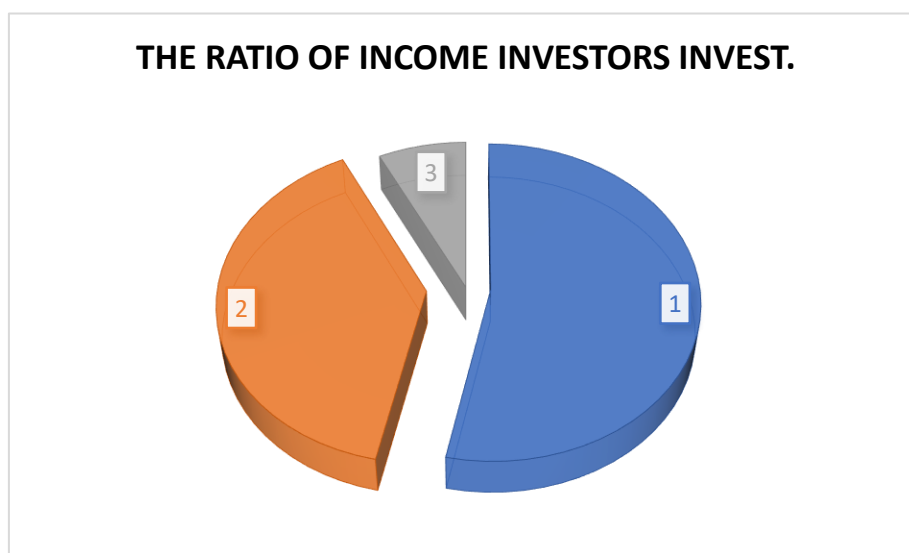




**Table 3.14 The ratio of income investors Invest.**

Particulars	Number of respondents	Percentage
0-10	80	53.33
10 to 25	59	39.33
25 to 50	11	7.33
Total	150	100

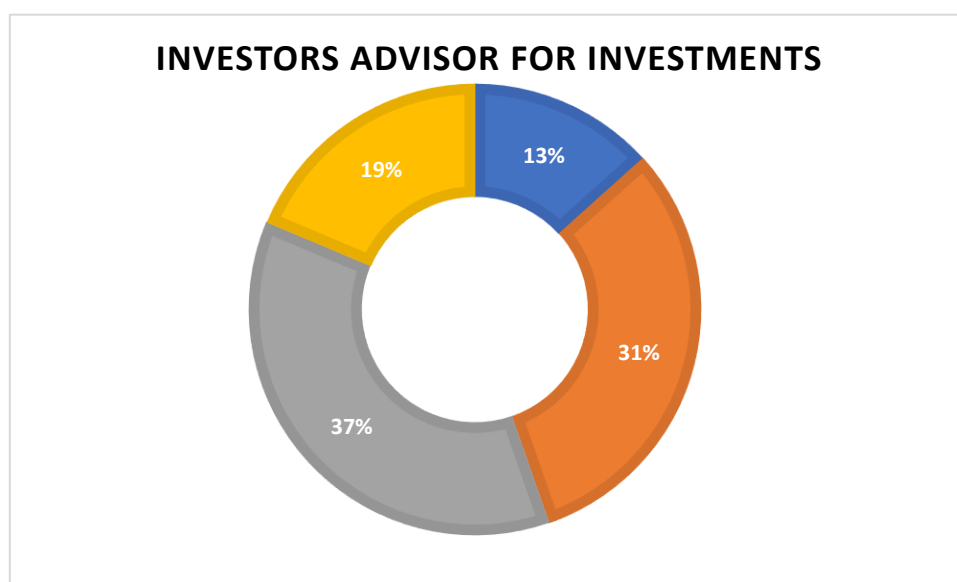
**Graph 3.14 The ratio of income investors Invest.**



**Table 3.15 Investor's advisor for Investments**

<b>Particulars</b>	<b>Number of respondents</b>	<b>Percentage</b>
Stock broker	20	13.33
Certified market professionals	47	31.33
Newspaper	55	36.66
Agent	28	18.66
Total	150	100

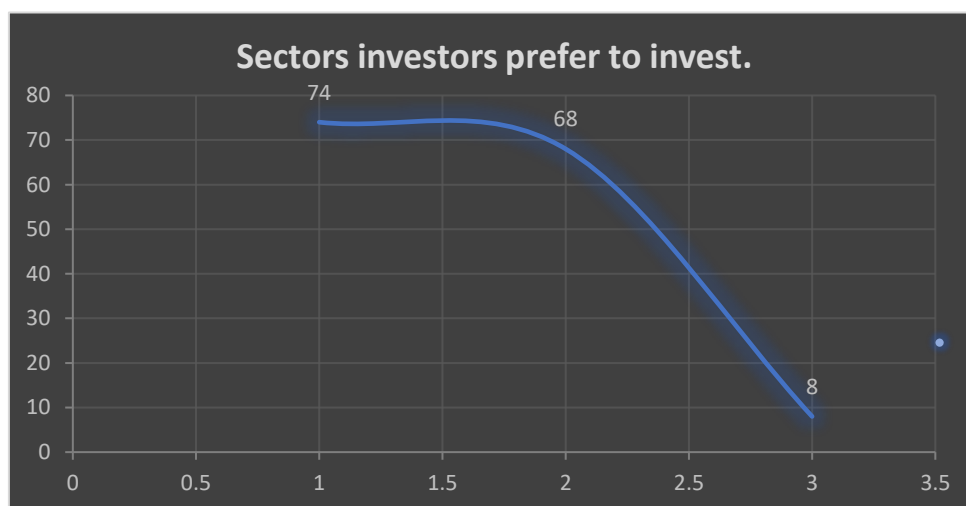
**Graph 3.15 Investor's advisor for Investments**



**Table 3.16 Sectors investors prefer to invest.**

<b>Particulars</b>	<b>Number of respondents</b>	<b>Percentage</b>
Private	74	49.33
Public	68	45.33
Foreign	8	5.33
Total	150	100

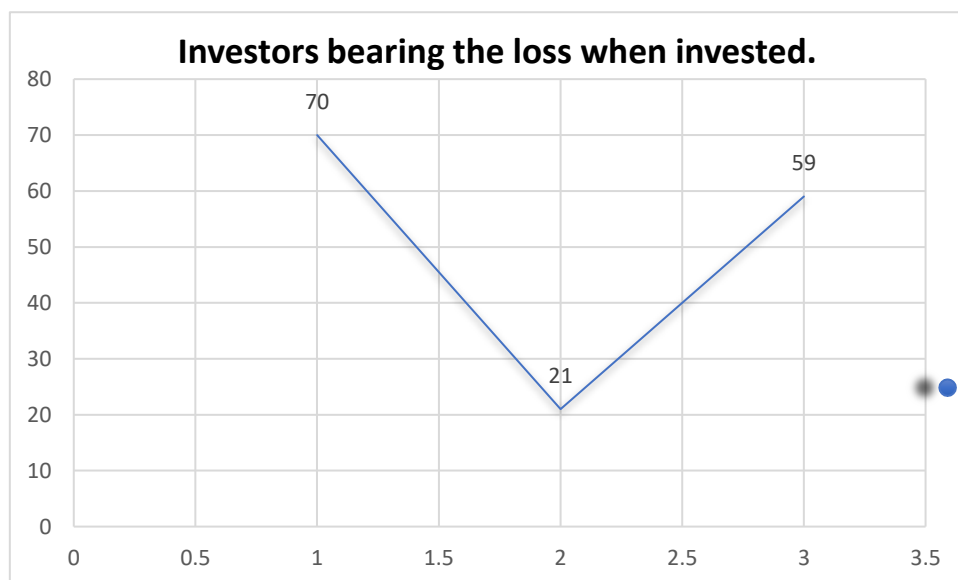
**Graph 3.16 Sectors investors prefer to invest.**



**Table 3.17 Investors bearing the loss when invested.**

<b>Particulars</b>	<b>Number of respondents</b>	<b>Percentage</b>
No	70	46.66
Yes	21	14
Not sure	59	39.33
Total	150	100

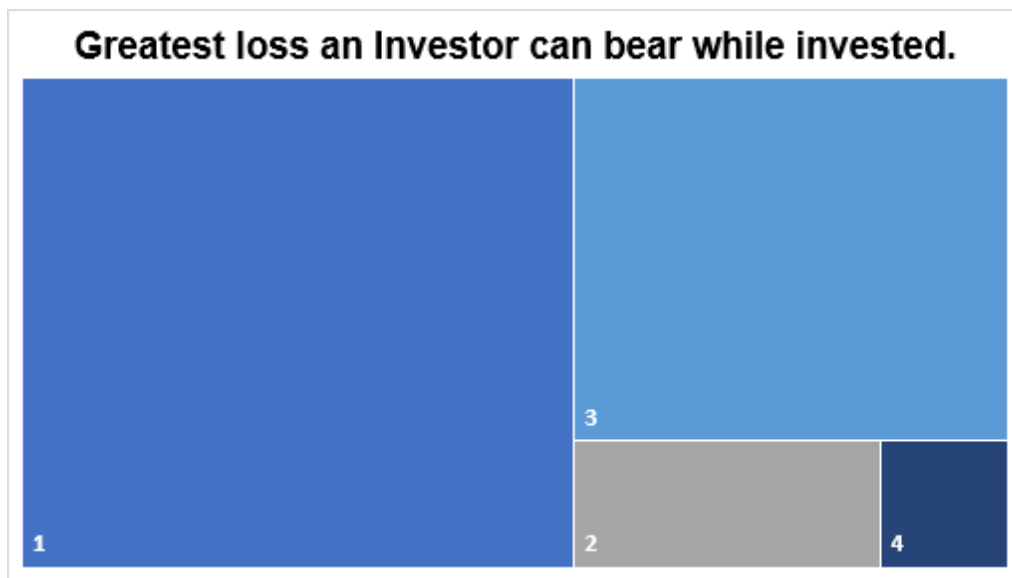
**Graph 3.17 Investors bearing the loss when invested.**



**Table 3.18 Greatest loss an Investor can bear while invested.**

<b>Particulars</b>	<b>Number of respondents</b>	<b>Percentage</b>
0-5	84	56
5 to 10	12	8
10 to 20	49	32.66
20 and above	5	3.33
Total	150	100

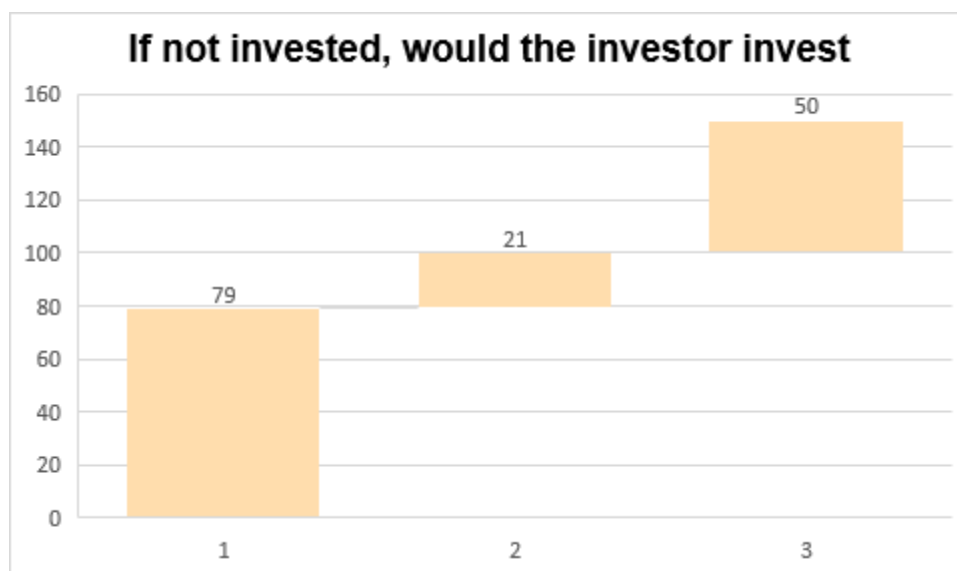
**Graph 3.18 Greatest loss an Investor can bear while invested.**



**Table 3.19 If not yet invested, would the investor invest.**

<b>Particulars</b>	<b>Number of respondents</b>	<b>Percentage</b>
Yes	79	52.66
No	21	14
Not sure	50	33.33
Total	150	100

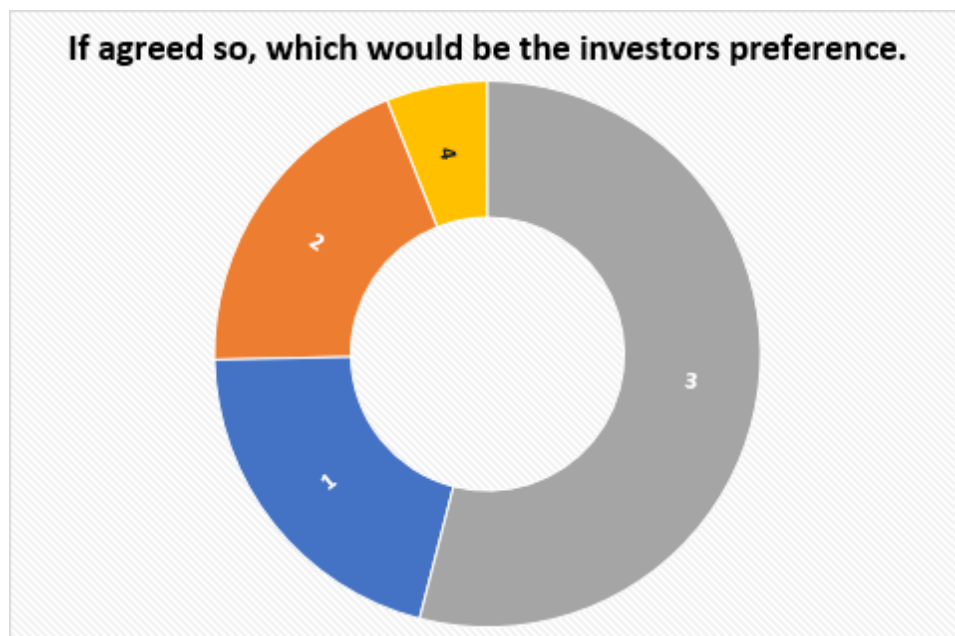
**Graph 3.19 If not yet invested, would the investor invest.**



**Table 3.20 If agreed so, which would be the investors preference.**

<b>Particulars</b>	<b>Number of respondents</b>	<b>Percentage</b>
Gold	31	20.66
Mutual fund	29	19.33
Stock	81	54
Crypto	9	6
Total	150	100

**Table 3.20 If agreed so, which would be the investors preference.**





## Chapter – 3



**(Findings, Solution and Conclusion)**

Analysis of investors expected rate of growth in investments with Age.

Data Information		
		N
Cases	Valid	150
	Missing	0
	Weighted Valid	150
Cells	Defined Cells	9
	Structural Zeros	0
	Sampling Zeros	1
Categories	At what rate do you want your investment to grow.	3
	Age	3

#### 4.1 Analysis of investors expected rate of growth in investments with Age.

##### **Convergence Information**<sup>a, b</sup>

Maximum Number of Iterations	20
Converge Tolerance	.00100
Final Maximum Absolute Difference	.00048 <sup>c</sup>
Final Maximum Relative Difference	.00040
Number of Iterations	4
a. Model: Multinomial Logit	
b. Design: Constant + Growth_of_Investment + Growth_of_Investment * Age	
c. The iteration converged because the maximum absolute changes of parameter estimates is less than the specified convergence criterion.	

## 4.2 Analysis of investors expected rate of growth in investments with Age.

### Goodness-of-Fit Tests <sup>a, b</sup>

	Value	df	Sig.
Likelihood Ratio	.000	0	.
Pearson Chi-Square	.000	0	.
a. Model: Multinomial Logit			
b. Design: Constant + Growth_of_Investment + Growth_of_Investment * Age			

The p-value is lesser than 0.05, we reject the **Null hypothesis** that there's no difference between the means and conclude that a significant difference does exist and we accept **Alternative hypothesis**.

### 4.3 Analysis of investors expected rate of growth in investments with Age.

#### Cell Counts and Residuals <sup>a, b</sup>

Age	At what rate do you want your investment to grow.	Observed		Expected	
		Count	%	Count	%
20-40	Steadily	19.500	41.9%	19.500	41.9%
	At an Average Rate	19.500	41.9%	19.500	41.9%
	Fast	7.500	16.1%	7.500	16.1%
Below 20	Steadily	25.500	24.6%	25.500	24.6%
	At an Average Rate	65.500	63.3%	65.500	63.3%
	Fast	12.500	12.1%	12.500	12.1%
40-60	Steadily	2.500	55.6%	2.500	55.6%
	At an Average Rate	.500	11.1%	.500	11.1%
	Fast	1.500	33.3%	1.500	33.3%

Analysis of investors expected rate of growth in investments with Gender.

Data Information		
		N
Cases	Valid	150
	Missing	0
	Weighted Valid	150
Cells	Defined Cells	6
	Structural Zeros	0
	Sampling Zeros	0
Categories	At what rate do you want your investment to grow.	3
	Gender	2

#### 4.4 Analysis of investors expected rate of growth in investments with Gender.

##### **Convergence Information**<sup>a, b</sup>

Maximum Number of Iterations	20
Converge Tolerance	.00100
Final Maximum Absolute Difference	4.96846E-5 <sup>c</sup>
Final Maximum Relative Difference	.00017
Number of Iterations	4
a. Model: Multinomial Logit	
b. Design: Constant + Growth_of_Investment + Growth_of_Investment * Gender	
c. The iteration converged because the maximum absolute changes of parameter estimates is less than the specified convergence criterion.	



4.5 Analysis of investors expected rate of growth in investments with Gender.

### Goodness-of-Fit Tests <sup>a, b</sup>

	Value	df	Sig.
Likelihood Ratio	.000	0	.
Pearson Chi-Square	.000	0	.
a. Model: Multinomial Logit			
b. Design: Constant + Growth_of_Investment + Growth_of_Investment * Gender			

The p-value is lesser than 0.05, we reject the **Null hypothesis** that there's no difference between the means and conclude that a significant difference does exist and we accept **Alternative hypothesis**.

#### 4.6 Analysis of investors expected rate of growth in investments with Gender.

##### **Cell Counts and Residuals <sup>a, b</sup>**

Gender	At what rate do you want your investment to grow.	Observed		Expected	
		Count	%	Count	%
Male	Steadily	15.500	42.5%	15.500	42.5%
	At an Average Rate	13.500	37.0%	13.500	37.0%
	Fast	7.500	20.5%	7.500	20.5%
Female	Steadily	31.500	27.0%	31.500	27.0%
	At an Average Rate	71.500	61.4%	71.500	61.4%
	Fast	13.500	11.6%	13.500	11.6%

Analysis of investors who could tolerate greatest loss over a single twelve-month period with Age.

Data Information		
		N
Cases	Valid	150
	Missing	1
	Weighted Valid	150
Cells	Defined Cells	12
	Structural Zeros	0
	Sampling Zeros	4
Categories	What is the greatest loss you could tolerate over any single twelve-month period?	4
	Age	3

4.7 Analysis of investors who could tolerate greatest loss over a single twelve-month period with Age.

### Convergence Information <sup>a, b</sup>

Maximum Number of Iterations	20
Converge Tolerance	.00100
Final Maximum Absolute Difference	.00042 <sup>c</sup>
Final Maximum Relative Difference	8.08926
Number of Iterations	7
a. Model: Multinomial Logit	
b. Design: Constant + Loss_which_can_be_Beared + Loss_which_can_be_Beared * Age	
c. The iteration converged because the maximum absolute changes of parameter estimates is less than the specified convergence criterion.	

4.8 Analysis of investors who could tolerate greatest loss over a single twelve-month period with Age.

### Goodness-of-Fit Tests <sup>a, b</sup>

	Value	df	Sig.
Likelihood Ratio	.000	0	.
Pearson Chi-Square	.000	0	.
a. Model: Multinomial Logit			
b. Design: Constant + Loss_which_can_be_Beared + Loss_which_can_be_Beared * Age			

The p-value is lesser than 0.05, we reject the **Null hypothesis** that there's no difference between the means and conclude that a significant difference does exist and we accept **Alternative hypothesis**.

#### 4.9 Analysis of investors who could tolerate greatest loss over a single twelve-month period with Age.

Age	What is the greatest loss you could tolerate over any single twelve-month period?	Observed		Expected	
		Count	%	Count	%
20-40	0-5	23.500	50.0%	23.500	50.0%
	5-10	5.500	11.7%	5.500	11.7%
	10-20	12.500	26.6%	12.500	26.6%
	20 and above	5.500	11.7%	5.500	11.7%
Below 20	0-5	58.500	56.3%	58.500	56.2%
	5-10	7.500	7.2%	7.500	7.2%
	10-20	37.500	36.1%	37.500	36.1%
	20 and above	.500	0.5%	.500	0.5%
40-60	0-5	3.500	70.0%	3.500	70.0%
	5-10	.500	10.0%	.500	10.0%
	10-20	.500	10.0%	.500	10.0%
	20 and above	.500	10.0%	.500	10.0%

Analysis of investors who could tolerate greatest loss over a single twelve-month period with Gender.

Data Information		
		N
Cases	Valid	150
	Missing	1
	Weighted Valid	150
Cells	Defined Cells	8
	Structural Zeros	0
	Sampling Zeros	0
Categories	What is the greatest loss you could tolerate over any single twelve-month period?	4
	Gender	2

4.10 Analysis of investors who could tolerate greatest loss over a single twelve-month period with Gender.

Maximum Number of Iterations	20
Converge Tolerance	.00100
Final Maximum Absolute Difference	.00027 <sup>c</sup>
Final Maximum Relative Difference	.00015
Number of Iterations	6
a. Model: Multinomial Logit	
b. Design: Constant + Loss_which_can_be_Beared + Loss_which_can_be_Beared * Gender	
c. The iteration converged because the maximum absolute changes of parameter estimates is less than the specified convergence criterion.	



4.11 Analysis of investors who could tolerate greatest loss over a single twelve-month period with Gender.

### Goodness-of-Fit Tests <sup>a, b</sup>

	Value	df	Sig.
Likelihood Ratio	.000	0	.
Pearson Chi-Square	.000	0	.
a. Model: Multinomial Logit			
b. Design: Constant + Loss_which_can_be_Beared + Loss_which_can_be_Beared * Gender			

The p-value is lesser than 0.05, we reject the **Null hypothesis** that there's no difference between the means and conclude that a significant difference does exist and we accept **Alternative hypothesis**

4.12 Analysis of investors who could tolerate greatest loss over a single twelve-month period with Gender.

**Cell Counts and Residuals<sup>a, b</sup>**

Gender	What is the greatest loss you could tolerate over any single twelve-month period?	Observed		Expected	
		Count	%	Count	%
Male	0-5	16.500	44.6%	16.500	44.6%
	5-10	3.500	9.5%	3.500	9.5%
	10-20	12.500	33.8%	12.500	33.8%
	20 and above	4.500	12.2%	4.500	12.2%
Female	0-5	68.500	58.5%	68.500	58.5%
	5-10	9.500	8.1%	9.500	8.1%
	10-20	37.500	32.1%	37.500	32.1%
	20 and above	1.500	1.3%	1.500	1.3%

Analysis of investors most preferred investment with time period preferred for investments by investors.

Data Information		
		N
Cases	Valid	150
	Missing	65
	Weighted Valid	150
Cells	Defined Cells	12
	Structural Zeros	0
	Sampling Zeros	0
Categories	Which is your most preferred Investment.	4
	Period you prefer to invest	3

#### 4.13 Analysis of investors most preferred investment with time period preferred for investments by investors.

##### **Convergence Information** <sup>a, b</sup>

Maximum Number of Iterations	20
Converge Tolerance	.00100
Final Maximum Absolute Difference	.00019 <sup>c</sup>
Final Maximum Relative Difference	.00133
Number of Iterations	4
a. Model: Multinomial Logit	
b. Design: Constant + Preferred_Investment + Preferred_Investment * Time_period	
c. The iteration converged because the maximum absolute changes of parameter estimates is less than the specified convergence criterion.	

#### 4.14 Analysis of investors most preferred investment with time period preferred for investments by investors.

##### **Goodness-of-Fit Tests <sup>a, b</sup>**

	Value	df	Sig.
Likelihood Ratio	.000	0	.
Pearson Chi-Square	.000	0	.
a. Model: Multinomial Logit			
b. Design: Constant + Preferred_Investment + Preferred_Investment * Time_period			

The p-value is lesser than 0.05, we reject the **Null hypothesis** that there's no difference between the means and conclude that a significant difference does exist and we accept **Alternative hypothesis**

#### 4.15 Analysis of investors most preferred investment with time period preferred for investments by investors.

##### Cell Counts and Residuals <sup>a, b</sup>

Period you prefer to invest	Which is your most preferred Investment.	Observed		Expected	
		Count	%	Count	%
Long Term	Gold	8.500	34.0%	8.500	34.0%
	Mutual Funds	2.500	10.0%	2.500	10.0%
	Crypto Currency	3.500	14.0%	3.500	14.0%
	Stock Market	10.500	42.0%	10.500	42.0%
Medium Term	Gold	13.500	28.7%	13.500	28.7%
	Mutual Funds	9.500	20.2%	9.500	20.2%
	Crypto Currency	4.500	9.6%	4.500	9.6%
	Stock Market	19.500	41.5%	19.500	41.5%
Short Term	Gold	20.500	24.4%	20.500	24.4%
	Mutual Funds	12.500	14.9%	12.500	14.9%
	Crypto Currency	8.500	10.1%	8.500	10.1%
	Stock Market	42.500	50.6%	42.500	50.6%