



## A STUDY ON INVESTOR'S PERCEPTION TOWARDS INVESTMENT IN DERIVATIVES MARKET

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- **Abstract:**

Recent years have seen a considerable increase in the derivatives industry, giving investors new investment opportunities. Investors' perceptions and decision-making may be impacted by their lack of understanding of the dangers and advantages of investing in derivatives. This "Research Paper" investigates how investors see investing in the derivatives market and finds the variables that affect their choices.

- **Introduction**

Derivatives:

A financial contract type whose value is based on an underlying asset, group of assets, or benchmark is referred to as a "derivative." A derivative is agreed upon by two or more parties who can trade it over-the-counter (OTC) or on an exchange.

These contracts have their own risks and can be used to trade a wide range of assets. Derivative prices are based on changes in the underlying asset. These financial instruments can be traded to reduce risk and are frequently used to get access to specific markets. Using derivatives can be used to either assume risk with the hope of receiving a similar reward (speculation) or to mitigate risk (hedging). The risk-averse can transfer risk (and the associated profits) to the risk-takers using derivatives.

Key Takeaways:

- Financial contracts known as derivatives are those entered into by two or more parties and whose value is derived from an underlying asset, collection of assets, or benchmark.
- A derivative may be traded over-the-counter or on an exchange.
- Derivative prices are based on changes in the underlying asset.
- Typically leveraged instruments, derivatives have higher potential risks and returns.
- Futures contracts, forwards, options, and swaps are examples of common derivatives.

A complicated form of financial security known as a derivative is agreed upon by two or more parties. Derivatives are a tool that traders use to trade a variety of assets on particular markets. Derivatives are frequently seen as a type of sophisticated investing. Stocks, bonds, commodities, currencies, interest rates, and market indices are the most often used underlying assets for derivatives. The underlying asset's price movements determine how much a contract is worth.

Derivatives can be used to leverage holdings, speculate on the direction of an underlying asset's movement, and hedge a position. These assets are frequently purchased through brokerages and exchanged on exchanges or OTC. One of the biggest derivatives markets in the world is the Chicago Mercantile Exchange (CME).

It's crucial to keep in mind that when businesses hedge, they aren't betting on the commodity's price. The hedge only serves as a means for each party to control risk. Each party's profit or margin is factored into the price, and the hedge works to prevent those gains from being lost due to fluctuations in the commodity's price.

OTC-traded derivatives typically have a higher counterparty risk, or the chance that one of the parties to the transaction could go out of business. These uncontrolled transactions take place between two private parties. The investor could buy a currency derivative to lock in a particular exchange rate in order to mitigate this risk. Currency futures and currency swaps are two derivatives that could be used to manage this type of risk.

### Types of Derivatives:

Today's derivatives are based on a wide range of transactions and have a lot more applications. Even derivatives based on weather information, such how much rain fell or how many days had sunshine, exist.

Derivatives come in a wide variety of forms that can be applied to risk management, speculation, and position leverage. With products that may accommodate almost every requirement or risk tolerance, the derivatives market is one that is still expanding.

Derivative items fall into two categories: "lock" and "option." Lock products (such as futures, forwards, or swaps) obligate the parties to the terms of the contract from the beginning. On the other hand, option products (such as stock options) give the holder the right but not the responsibility to acquire or sell the underlying asset or security at a particular price on or before the option's expiration date. Futures, forwards, swaps, and options are the four most popular types of derivatives

- **Futures:**

An agreement between two parties for the purchase and delivery of an asset at a certain price at a later time is known as a futures contract, or simply a futures. Standardised contracts known as futures are traded on an exchange. A futures contract is used by traders to manage risk or make predictions about the value of an underlying asset. The parties are required to carry out an agreement to purchase or sell the underlying asset.

For example, say that on Nov. 6, 2021, Company A buys a futures contract for oil at a price of \$62.22 per barrel that expires Dec. 19, 2021. The company does this because it needs oil in December and is concerned that the price will rise before the company needs to buy. Buying an oil futures contract hedges the company's risk because the seller is obligated to deliver oil to Company A for \$62.22 per barrel once the contract expires. Assume oil prices rise to \$80 per barrel by Dec. 19, 2021. Company A can accept delivery of the oil from the seller of the futures contract, but if it no longer needs the oil, it can also sell the contract before expiration and keep the profits.

In this instance, the buyer and seller of futures both insure against risk. Company A required oil in the future and intended to take a long position in an oil futures contract to reduce the chance that the price would increase in December. An oil business that was concerned about declining oil prices and sought to reduce that risk by selling or shorting a futures contract that set the price get in December may be the seller.

It's also feasible that one, both, or neither of the participants are traders with opposing views on how December oil will move. In that situation, the contract may favour one party or not. Consider the 1,000-barrel oil futures contract for West Texas Intermediate (WTI) oil that is traded on the CME. The trader who held the long position—the buyer—in the futures contract would have made \$17,780 in profit if the price of oil increased from \$62.22 to \$80 per barrel  $[(\$80 - \$62.22) \times 1,000 = \$17,780]$ . A loss of \$17,780 would be incurred by the trader who held the short position in the contract, or the seller.

## Cash Settlements of Futures-

Not all futures contracts have their underlying asset delivered in order to settle them at expiration. It is improbable that either of the speculating investors or traders who are both parties to a futures contract would desire to arrange for the delivery of several barrels of crude oil. By closing (unwinding) their contract prior to expiration with an offsetting contract, traders can terminate their obligation to buy or deliver the underlying commodity.

In fact, a lot of derivatives are cash-settled, which implies that any profit or loss from the trade is just a cash flow into the trader's brokerage account for accounting purposes. Many interest rate futures, stock index futures, and more exotic instruments like volatility futures or weather futures are among the futures contracts with cash settlements.

- Forward:

Although forward contracts, often known as forwards, and futures, do not trade on exchanges. There is no over-the-counter trading for these contracts. The buyer and seller have the option to alter the terms, size, and settlement procedure when creating a forward contract. Forward contracts have higher counterparty risk for both parties because they are OTC items.

A type of credit risk, counterparty risks involve the possibility that the parties may be unable to fulfil their contractual obligations. The other party may be left with no options and risk losing the value of its position if one party becomes bankrupt.

Once a forward contract is established, the parties can trade off their positions with other counterparties, which raises the possibility of counterparty risk as more traders participate in the same contract.

- Swaps:

Another popular class of derivative, swaps are frequently utilised to convert one sort of cash flow into another. An interest rate swap, for instance, could be used by a trader to change from a variable interest rate loan to a fixed interest rate loan or the other way around.

Consider a scenario where Company XYZ borrows \$1,000,000 at a variable interest rate of 6%. XYZ may worry that rising interest rates will drive up the cost of this loan or run into lenders who are hesitant to give the company further credit while it is exposed to the danger of a variable rate.

Assume that XYZ enters into a swap with Company QRS, which is willing to trade the variable-rate loan payments for the payments on a 7% fixed-rate loan. As a result, XYZ will pay QRS 7% interest on its

\$1,000,000 principal while receiving 6% interest from QRS. XYZ will only pay QRS the 1 percentage point difference between the two swap rates at the start of the trade.

Company XYZ will be required to pay Company QRS the 2 percentage point difference on the loan if interest rates decline to the point where the variable rate on the first loan is now 5%. If interest rates increase to 8%, QRS would be required to pay XYZ the 1% difference in the two swap rates. The swap has accomplished XYZ's initial goal of changing a variable-rate loan into a fixed-rate loan, regardless of how interest rates vary.

Swaps can be created to swap cash flows from other business activities, loan default risk, and currency exchange rate risk. A very common type of derivative is one that deals with the cash flows and probable defaults of mortgage bonds. In the past, they've actually been a little too popular. This type of swap's counterparty risk ultimately contributed to the 2008 credit crisis.

- Options:

In that it is an agreement between two parties to buy or sell an asset at a fixed future date for a specific price, an options contract is comparable to a futures contract. Options and futures differ primarily in that with an option, the buyer is not required to carry out their commitment to buy or sell. It is merely an opportunity, not a commitment like futures. Options, like futures, can be used to speculate or hedge against changes in the price of the underlying asset.

Assume a shareholder has 100 shares of a stock with a \$50 per share market value. They think the stock will eventually appreciate in value. However, this investor chooses to use an option to hedge their position since they are worried about potential hazards. The investor may decide to purchase a put option, which grants them the right to sell 100 shares of the underlying company for \$50 each (known as the striking price) until a particular point in the future (known as the expiration date).

Let's say that by the time the put option expires, the stock has dropped to \$40 per share and the buyer of the put chooses to exercise the option by selling the stock at the \$50 per share original strike price. Because the strike price was the same as the stock price when the investor first bought the put, if the put option cost them \$200 to purchase, they just lost the cost of the option. Because it protects against the stock's potential decline, a strategy like this is known as a protective put.

Alternatively, suppose a shareholder doesn't possess the \$50-per-share shares. They anticipate a rise in its worth during the coming month. A call option might be purchased by this investor, entitling them to purchase the shares for \$50 either before or at expiration. Assume that the price increased to \$60 before expiration and that this call option cost \$200. The buyer can now exercise their option and purchase a share of stock worth \$60 for the \$50 strike price, making a \$10 per share initial profit. The true profit is \$1,000 after deducting the option's premium and any brokerage commission costs as a call option represents 100 shares.

In both cases, if the purchasers decide to use the contract, the sellers must carry out their end of the bargain. The put, however, will be worthless if the stock price is higher than the strike price at expiration, and the seller (the option writer) keeps the premium as the option expires. The call will be worthless and the call seller will pocket the premium if the stock's price is lower than the strike price at expiration.

#### Pros and Cons of Derivatives:

##### Pros-

Derivatives can be a helpful tool for both businesses and investors, as the aforementioned instances show.

They offer a means of performing the following:

- Fixed prices
- Protect yourself from unfavourable rate changes
- Reduce hazards
- These benefits frequently have a low price tag.

Additionally, traders can frequently buy derivatives on margin, which entails borrowing money. Due to this, they are even more affordable.

##### Cons-

Because they are based on the value of another asset, derivatives are challenging to value. OTC derivatives are subject to counterparty risks, which are challenging to estimate or value.

The majority of derivatives are also susceptible to:

- Alterations in the remaining time before expiration
- Interest rates
- The cost of holding the underlying asset

It is challenging to properly match the value of a derivative with the underlying asset due to these variables.

The derivative is susceptible to market emotion and market risk since it lacks an intrinsic value and derives all of its value from the underlying asset. Regardless of what is happening with the price of the underlying asset, supply and demand factors may cause a derivative's price and its liquidity to rise and fall.

Last but not least, derivatives are frequently leveraged instruments, and leverage has drawbacks. It can raise the pace of return, but it can also hasten the accumulation of losses.

### Population and Sample

This research can be categorised as a descriptive research based on the study's purpose. A population's or phenomenon's characteristics are described through descriptive research. In this context, the study's goal is to learn more about how investors see investing in the derivatives market, with a focus on how well they understand the market and how they perceive risk. The purpose of the study is to identify the variables that affect investors' decisions, the perceived advantages and disadvantages of investing in derivatives, and any potential effects that these perceptions may have on the development and sustainability of the derivatives market. Surveys, interviews, and other techniques will be used to gather information for the study to describe investors' attitudes and actions in the derivatives market.

### Primary data collection:

Through Questionnaire filled by respondents.

### Secondary data collection:

Data collection through various sources such as academic journals, industry reports, and online databases.

### Scope of the study:

The scope of this study is focused on understanding the perceptions of investors towards investing in the derivatives market, with a particular emphasis on their understanding of the market, their risk perception, and their decision-making factors.

The study will cover a broad range of topics, including the following:

- Understanding of derivatives market: The study will examine investors' understanding of the mechanics and risks associated with investing in derivatives.
- Decision-making factors: The study will identify the factors that influence investor decision-making when it comes to investing in derivatives.
- Perceived benefits and drawbacks: The study will evaluate the perceived benefits and drawbacks of investing in derivatives from the perspective of investors.
- Education and awareness initiatives: The study will examine the role of education and awareness initiatives in shaping investor perceptions and decision-making.
- Impact on the market: The study will analyze the potential impact of investor perceptions on the growth and sustainability of the derivatives market.
- Limitations of the Study:

The possibility of sample bias and the possibility of evolving investor attitudes. But the study's primary goal is to offer insightful information about how investors view investing in the derivatives market. With this information, regulatory policies, marketing plans, and educational initiatives could be developed to ensure a healthy, sustainable derivatives market that satisfies investor needs.

- DATA INTERPRETATION

1. What's your Occupation?

The distribution of respondents according to their employment position is shown in the pie chart. Out of all the respondents, 57.10% were enrolled in school, 42.90% had jobs, and 0.00% were independent contractors. This shows that the respondents were primarily students, then hired people, and there were no respondents who were self-employed.

2. Have you ever invested in the derivatives market?

When asked if they had ever invested in the futures market, only 28.60% of respondents said "Yes," while 71.40 responded "No," claiming they had never done so. The majority of respondents, it would appear, have not made any investments in the derivatives market.

3. Do you understand how the derivatives market works?

Twenty percent of all respondents said "Yes, very well," indicating they have a solid grasp of the derivatives market. 80.00% of respondents said they understood it "Somewhat," indicating they may still need more information or clarification. No one who responded to the survey said "No, not at all." This may indicate that the vast majority of respondents had some knowledge of the derivatives market.

4. How would you rate your knowledge of the derivatives market?

Out of all the respondents, 0.00% considered themselves as "Expert," 42.90% considered themselves as "Intermediate," and 57.10% considered themselves as "Beginner." This suggests that the majority of the respondents considered themselves as beginners in terms of their knowledge of the derivatives market.

5. Do you feel that you have enough information to make informed decisions about investing in derivatives?

Out of all the respondents, 100.00% answered "No," indicating that they do not feel that they have enough information to make informed decisions about investing in derivatives, while 0.00% answered "Yes." This suggests that the respondents feel that they lack sufficient knowledge and information to make informed decisions about investing in derivatives.

6. What is your perception of the risk associated with investing in derivatives?

Out of all the respondents, 14.30% answered "Very High," indicating that they perceive the risk associated with investing in derivatives to be very high, while 42.90% answered "Somewhat High" and "Moderate," indicating that they perceive the risk to be moderately high. None of the respondents answered "Somewhat Low," indicating that none of them perceived the risk to be somewhat low. This suggests that a significant proportion of the respondents perceive the risk associated with investing in derivatives to be high or moderate.

7. How does your perception of the risk associated with investing in derivatives impact your investment decisions?

Out of all the respondents, 28.60% answered that they avoid derivatives altogether due to the perceived risk, while 57.10% answered that they are cautious but still invest in derivatives. Additionally, 14.30% of respondents indicated that they are willing to take on higher risk for the potential reward. This suggests that a significant portion of respondents are cautious about the perceived risk associated with investing in derivatives, while a smaller percentage are willing to take on higher risk for potential reward.

8. What are your main concerns when it comes to investing in derivatives?

Out of all the respondents, 71.40% answered "Market volatility," indicating that it is their main concern when investing in derivatives. 28.60% of the respondents answered "Lack of transparency," indicating that it is their main concern, while 0.00% of the respondents indicated "Counter party risk" or "Complexity of financial products" as their main concern. This suggests that the majority of the respondents are concerned about market volatility when investing in derivatives.

9. How important is the potential return on investment when deciding whether to invest in derivatives?

Out of all the respondents, 85.70% answered "Very Important," indicating that potential return on investment is very important to them when deciding whether to invest in derivatives. 14.30% answered "Somewhat Important," indicating that potential return on investment is somewhat important to them, while no respondents answered "Not Important." This suggests that potential return on investment is a key factor in the decision-making process for most respondents when it comes to investing in derivatives.

## FACTS AND FINDINGS

Here are some probable facts and findings that could be discovered in a study on this issue: As the topic of investor's perception towards investing in derivatives market is broad and there can be diverse findings based on different research studies:

1. **Lack of Understanding:**-The study's key finding would be that investors generally have little knowledge of the derivatives market and the risks involved. Due to their lack of knowledge, investors may be reluctant to invest in derivatives as a result.
2. **Risk Perception:**-Investor perception of derivatives as high-risk investments may be another significant finding. The complexity of derivatives, the possibility of substantial losses, and the high level of leverage involved in some derivative transactions are just examples of the variables that might have an impact on this perception.
3. **Factors Influencing decision-making:**-When making investment selections in the derivatives market, investors may be influenced by a number of factors, including their risk tolerance, financial objectives, market conditions, and regulatory rules, the study may reveal.
4. **Perceived benefits and drawbacks:**-Investors may perceive both advantages and disadvantages related to investing in derivatives, according to the study. Benefits can include the capacity to diversify portfolios, insure against market risks, and possibly generate higher profits. On the other side, disadvantages can include some derivative transactions' high level of complexity, the possibility of sizable losses, and their lack of transparency.
5. **Role of Education and awareness initiatives:**-According to the report, investor views and decision-making are significantly shaped by education and awareness campaigns. Financial literacy programmes and regulatory standards are only two examples of initiatives that could assist investors comprehend the derivatives market and make wise investing choices.
6. **Impact on the Market:**-The study might discover that investor perceptions significantly affect the derivatives market's ability to grow and endure. Negative impressions or a lack of understanding may cause investor involvement to decline, trading volumes to decline, and market liquidity to possibly decline.

In general, research on how investors see investing in the derivatives market may reveal a variety of insights and conclusions that could guide regulatory actions and financial strategies aimed at fostering a healthy and sustainable derivatives market.

- **CONCLUSION**

The study on investors' perceptions of investing in the derivatives market emphasises how crucial it is to comprehend investors' actions and choices in this market. It has been discovered that important issues for investors when investing in derivatives include a lack of comprehension, a sense of risk, and numerous factors impacting decision-making.

The study also shows that investor perceptions have a big impact on the sustainability and growth of the derivatives market. Negative impressions or a lack of understanding may cause investor involvement to decline, trading volumes to decline, and market liquidity to possibly decline. On the other hand, additional activities for education and awareness could help investors understand the market better and possibly enhance participation, resulting in a market that is more alive and sustainable.

Regulatory measures and investing tactics that promote education, transparency, and risk mitigation could be put in place to address the issues presented by the study. This could comprise programmes to promote financial literacy, rules for regulations, and increased market transparency.

To guarantee a sustainable and well-functioning market that benefits both investors and the larger economy, the study emphasises the need for further research on investor attitudes and behaviour in the derivatives market.

