

Study of Futures Contract with respect to its Pay offs

Abstract:

Historically signs of derivative contracts are seen long back in 12th century wherein sellers signed contracts promising future delivery in European trade fairs. English Cistercian Monasteries frequently sold their wool up to 20 years in advance to foreign merchants in 13th century. Futures market in rice was developed to protect rice producers in 17th century in Japan. All these are the examples of derivatives product specifically the Forwards. Other products in the derivatives market are Futures, Options and Swaps. Forwards are bilateral contract between two parties wherein price, quality, quantity and other delivery conditions of the contract are fixed itself on the day of initiating the contract. The basic idea behind the forward contract is to lock the price today there by avoiding price risk in time to come. Apart from this beauty and the convenience of the forward contract, there is one inherent risk to it which is counter party risk. The loss arising because of the opposite party has not fulfilled his obligation is thus major drawback of forward contract.

In Indian context index Futures contracts were initiated in June 2000 whereas stocks Futures contract were started in November 2001. The counterparty risk which was there in forward contract is mitigated in Futures Contract because of presence of clearing corporation as a risk management entity in exchange traded derivatives. The current study seeks to throw a light on the concept of Futures Contract along with understanding its pay off chart.

Keywords: *Future Contracts, Payoffs*

Methodology

The current paper is exploratory in nature and is based on the secondary data.

The paper intends to present complicated terminologies associated with Futures Contract in easy method and language so as a common reader can bring out the substance from the study.

Objectives

1. To study the concept of Futures Contract.
2. To understand the utility of Futures as hedging devices for corporate entity like mutual funds.
3. To understand the pay off diagram of Futures Contract.

A Futures Contract is more or less similar to forward contract except that a Futures is an exchange traded contract whereas forwards are privately negotiated contract. There was an inherent counter party risk in forwards contract which is not so in Futures contract because it is made through an organized and regulated exchange with the presence of clearing corporation. One can enter into Futures contract as a hedger or speculator or an arbitrageur. Hedger who is in some risk tries to shift his risk through this market.

Speculator, who was not in the risk initially, may enter into the Futures contract expecting some gains by taking the risk. Arbitrage is kind of deal wherein the participant tries to make good of price difference in a product in two different markets. He simultaneously enters into two opposite trades to earn price difference without much of the risk.

Futures market is the answers to the shortcomings of forward market. A Future contract is an agreement to buy or sale a fixed amount of an asset on a future date at a price decided at the time of entering the contract. A trader who buys the Future contract actually takes a long position on the market and the trader who shorts the future is supposed to take a short position on the market. Based on these features of Futures contract can be listed as below:

1. It is a contract between two parties entered through recognized exchange.
2. There is a centralized trading platform called exchange.
3. Buyers and sellers freely interact helping the price discoveries in the market.
4. Both the parties pay margin so that settlement is guaranteed.
5. Quality of the underlying is standardized and agreed at the

time of initiating the contract.

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While entering into the Futures contract both the parties are required to deposit the amount in the margin account which is known as initial margin. Initial margin is collected so that the deal is safeguarded against any potential losses arising out of the price fluctuation of the underlying asset. If there is higher volatility in the underlying asset exchange may charge higher percentage of the initial margin. In Indian context there are one month, two months and three months Futures contract available for trading. Profit and losses arising out of the price changes in underlying asset are settled on day to day basis called mark to market settlement.

Institutional investors like mutual fund companies, insurance companies, pension funds managers often have a portfolio of securities. Whenever they expect the downside risk on their portfolio they can hedge their positions specifically going short with index Futures. Any losses arising in the portfolio will be compensated by the profits from this short Futures position and this is the utility of Futures contract as hedging devices.

If a trader expects price of an underlying assets to move up, he can buy Futures contract of that underlying asset. If the market moves as per his expectations, he will make profit. Similarly, if a trader expects the price of an underlying asset to go down, he can sell self-Futures contract of that asset and can earn if the market movements are as per his expectations. The

real beauty of the Futures contract is that, one can earn from the rising market as well as one can earn from the falling market. The potential to earn from the falling market is specific type of privilege which is generally missing in the traditional kind of investment avenues. This beauty of the Futures contract can be reflected from its pay off charts.

Pay off chart for long Futures contracts

Long Futures at 17000	
Market price at expiry	Long Futures pay off
16700	-300
16800	-200
16900	-100
17000	0
17100	100
17200	200
17300	300

The above pay off chart signifies that a trader with long Futures contract can earn profits with the market going up and makes losses with the market is going down.

Pay off chart for short Futures contracts

Short Futures at 17000	
Market price at expiry	Short Futures pay off
16700	300
16800	200
16900	100
17000	0
17100	-100
17200	-200
17300	-300

The above pay off chart signifies that a trader with short Futures contract can earn profits with the market going down and makes losses with the market is going up.

Conclusion:

A Futures Contract is more or less similar to forward contract except that a Futures is an exchange traded contract whereas forwards are privately negotiated contract. There was an inherent counter party risk in forwards contract which is not so in Futures contract because it is made through an organized and regulated exchange with a presence of clearing corporation. Futures market is the answers to the shortcomings of the forward market. A Future contract is an agreement to buy or sale a fixed amount of an asset on a future date at the price decided at the time of entering the contract. In Indian context,

there are one month, two months and three months Futures contract available for trading.

Futures contract have its own kind of utility as hedging instruments. Institutional investors like mutual fund companies, insurance companies, pension funds managers often have a portfolio of securities. Whenever they expect the downside risk on their portfolio they can hedge their positions specifically going short with index Futures. Any losses arising in the portfolio will be compensated by the profits from this short Futures position and this is the utility of Futures contract as hedging devices. The real beauty of the Futures contract is that, one can earn from the rising market as well as one can earn from the falling market. The potential to earn from the falling market is specific type

of privilege which is generally missing in the traditional king of investment avenues. This beauty of the Futures contract can be reflected from its pay off charts.

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