Understanding Derivatives and its Implications

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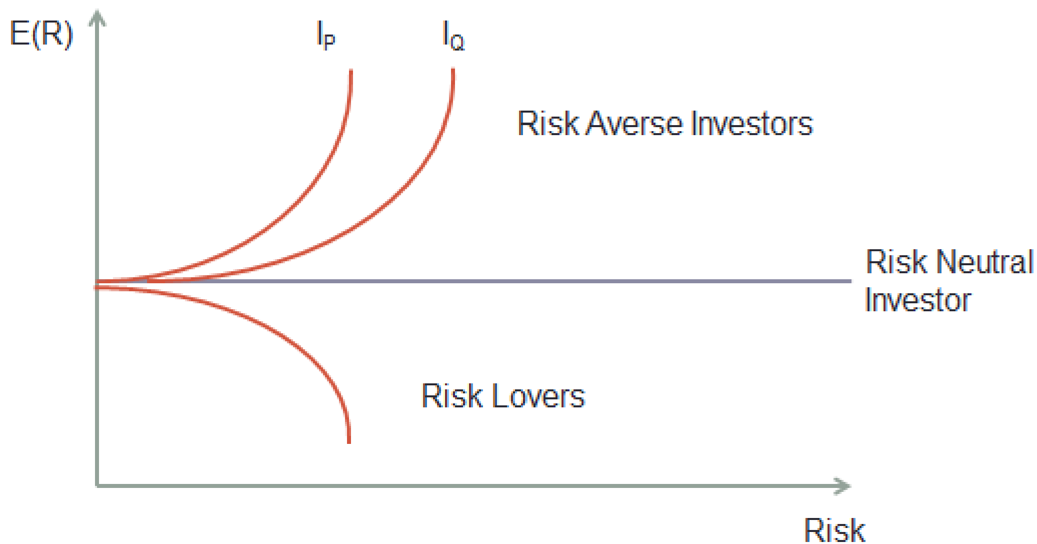
Abstract: Derivatives are complex and hard to understand. Most of the people either do not understand it or afraid of t using it for their investment. The fear of total loss in their investment is the cause of its less popularity for a common investor. The present work is an attempt to understand the derivatives in its true sense. This will help investors as well as academicians to understand it properly and use it if they wish to have higher return on their investment.

Derivative instruments are much in news over the last many months. The fall in market over a period and its variability has made the investor worse in terms of their return on investment. Most of the investors are looking at the derivatives market to recover their loss in a short span of time.

Now the question is why people should or should not invest in derivatives. The basic thing is the return on their invested money and the time period. Let's take an example. If I invest in fixed deposit in a bank at the current rate, I will be getting around 7.50 percent in return annually means for a sum of Rs 1,00000 I will get about Rs 7500 at the year end. The advantage is almost no risk. If I take some risk and invest in bonds or debenture of a company my return would be slightly high and may get about 9 percent means about Rs 9000 at the end of the year with some risk. The risk is that the company may not pay me at the end or there may be some lock in period that in case I need the money in between the year I have to either sell it in open market or may wait till the end of the term. The third scenario is that I want still higher return and have some risk-taking abilities. Risk taking is a relative term and depends and varies from person to person. Some people do not take risk at all and play safe. They are called risk averse investors. Which simply means that they will take zero risk and significantly low or normal return form their investment. On the other hand, some people are risk neutral, means that they will increase the return in proportion to their risk capacities. If risk is high, they expect the return to be equally high. The last category is the risk taker. This type of people is also called high risk investors. Their basic aim is higher return irrespective of risk. They make investment in those securities which give high return and the risk is also high. If successful they get high return but if unsuccessful, they may lose the return as well as investment.

The following diagram depicts the risk preference of various investors



Source: Google Images

Continuing the discussion Lets assume one wants to take high risk and high return and make investment in shares of company. Here one should be careful as the market price of some of the shares may be many times higher than their issue price. One has the choice to make investment either through Initial Public offering or buying it from market. If its initial public offering one rarely gets share at the issue price because most of the companies issue it at a premium. If subsequent offering is in the market the premium is less than the current market price. Here the interesting fact is if the issue is oversubscribed there is a lottery system and if lucky one may get share or may get his investment back. Sometimes one gets about one fifth or one fourth of its investment in shares.

If I purchase it from the market, I will have to pay many times more that the issue price. For a share which has an issue price of Rs 10 may have market value of Rs 500 or may be more. If one is waiting for the dividend it will be paid on the issue price e.g. for 10 percent dividend declared on a share one will get Rs 1 on one share. But why people make investment in shares is not always dividend but the difference in value of the share. Difference is simply the buying price and selling price. Return is calculated in percentage over a period. Take the example If I invest in 100 shares each valuing Rs 1000. My total investment is Rs100000 on Jan 1, 2019. Let’s suppose the price of the share increases to Rs 110 in March 31, 2019. My investment grew to 110000 in a short span of 3 months. Means 10 percent return in 3 months and annually multiplied by 4 which is huge. Here it’s a rosy picture the price may go down to 90 in the same time period in that case me return is negative. But instead of selling the share in March I would like to hold it till the time I get increase in share price.

Actually, I am taking risk to get higher return. Most people avoid this uncertainty and do not make investment in shares. But depending on the risk perception there are people who take risk. Derivatives are there in the market for them. Actually, the basic purpose of derivatives is to avoid risk of fluctuations in price and to work as an insurance but its interesting to deal in

them. In the above example If I buy 100 shares, I will have to spend Rs 100000. I can hold the shares till the company is in existence. If I make investment in an option to buy the shares, I will have to spend not Rs 100000 but only a margin set for that share. Let's assume the margin is 35 percent, means I will pay only 35000 to buy the same quantity of shares. If the price of the shares increased in the same proportion i.e. 110. I will exercise the option and buy the shares at Rs 100 and sell it at Rs 110. Here my return is 10 percent in one month for an investment of Rs 35000. The risk factor is that I have to settle the transaction at the end of month i.e. last Thursday in India. Let's suppose the price drops down to 90. In that case I will not exercise the option. What's my loss? My loss is simply the premium I paid to buy this option.

If one look from above its win win situation in derivatives i.e. option and future but the risk is the settlement at the end of the month. One has to settle the transaction at the end of the month whether profit or loss. One interesting feature of derivatives is one can sell the asset which one does not possess. It simply means I can enter into a contact for selling the share which I don't have and on settlement date buy the shares from the market. An example will clear this. Suppose I believe that the price of a security will go down in near future. I enter into the market and sell that particular security. Here to continue with the same example I sell it for Rs 100 in future. Remember I will invest only Margin i.e. Rs 35000 only. At the settlement date if the price goes down to Rs 90. I will buy it from the market and sell it to predetermined price of Rs. 100 for which I have got the option. If the price goes up, I will not exercise the option and my loss would be the premium I paid for buying that option.

There can be currency option also which is very popular in foreign trade. For import and export the biggest risk is the fluctuation in the value of currency. A trader in foreign trade can lose huge amount of money only due to currency fluctuation. Derivatives helps the traders in this regard and now a days its almost certain that foreign exchange traders take option to avoid risk.

If we see the above discussion it's a safe bet and people can take risk which is calculated. The purpose of introduction of derivatives was to minimize the risk of the investor through participation in derivatives. Take the example of the commodity derivatives which acts as an insurance for the crop failure or reduction in price when the crop comes to the market. In India when the commodity derivatives were used farmers thought it as an easy way of earning money. Instead of taking a calculated risk they forgot the farming and intensively indulged in option trading, the result was disastrous. Many came on road losing even their agriculture land.

Investors should take the option as an insurance rather than gambling. Since the amount invested is small as compare to buying and selling share, they think it as an easy way of becoming rich in short period of time. Always remember there are no short cut in market to earn money. One should calculate the risk and return and invest accordingly.