Adoption of Collar Strategy – A Case of Mr. Dixit (An Investor)

Introduction

Derivative trading was introduced in India in June 2000 and turnover has increased dramatically since then. According to the World Federation of Exchanges, the National Stock Exchange of India (NSE) is ranked 4th globally in single stock futures, 2nd in stock index options and 5th in stock index futures in terms of trading volumes for the period January to December 2012. India's equity derivative markets are thus among the largest in the world. When an investor has an open position in the underlying, he can use the derivative markets to protect that position from the risks of future price movements. This is particularly true when the underlying portfolio has been built with a specific objective in mind, and unexpected movements in price may place those objectives in risk.

Overview and Analysis

While using futures or options to hedge the position it is noticed that

1. The option premium reduces the net position value, even if the market price did not move.
2. Option comes at a specific cost by way of premium.
3. The loss is limited to the premium amount if the underlying moves against the option position (markets moving up when the investor has bought a put option).
4. The futures hedge keeps the net position value constant, irrespective of market movement. What is lost in portfolio value is gained in futures and vice versa.
5. In the options hedge, the gain if the market price moved up depends on how much the portfolio position is participating in the upside, after accounting for the option premium.
6. The gain if the market price moved down depends on the option position paying off on the downside after accounting for the option premium.
7. The payoff in a futures position is the same (symmetrical) whether the market price moves up or down. The payoff in the options position is different (asymmetrical) for up and down -markets and depends on how much was the movement in prices, and what was the premium paid.

Status Report

ABC Ltd.'s share prices are volatile. Currently the share is trading at Rs.700 on the Bombay Stock Exchange. Severe competition and the entry of foreign players may lead to fall in the price of the shares of ABC Ltd. Mr. Dixit creates a short position at the price of Rs. 680 in shares. He wants to have a suitable option strategy to protect himself against any loss. The option rates are given below:

Strike Price (Rs)	Call Option (Rs)	Put Option (Rs)
550	110	20
600	80	44
760	14	80
800	06	90

Question:

Mr. Dixit buys a call at Rs. 600 and sells the put at the strike price of Rs. 760. He wants to know his profile if the share price are Rs. 520, 550, 600, 700, 760, 800 and 840. Outline the strategy adopted by Mr. Dixit which will put a limit on profits / losses.

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