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CERTIFIED INVESTMENT RESEARCH ANALYST®

Market Orders & Types

TICKER

Each stock on the Stock exchange has a ticker symbol. For example Microsoft has a ticker symbol MSFT.

BID, ASK and SPREAD

The BID price is the price at which a dealer/specialist is willing to BUY the stock. The ASK is the price at which the dealer/specialist is willing to sell the stock.

The difference between the BID and ASK is called the SPREAD. SPREAD = ASK – BID = $25.03 – $24.09 = 0.04

MSFT Current Price: $25.00 BID: $24.09 ASK: $25.03 SPREAD: 0.04

TYPES OF ORDERS

Market Order: A market order is an order to BUY or SELL a stock at the current
market price.

So say you put in a MARKET order to buy 1000 shares of MSFT. - MKT (BUY, 1000)
This order will be executed @ the current ASK price of $25.03.

TYPES OF ORDERS

LIMIT ORDER : A limit order is an order to BUY or SELL a stock at a specified price or better.

Thus for a LIMIT BUY order we want to buy at price X or lesser and for a LIMIT SELL order we want to sell at price X or higher.

Example: MSFT Current Price: $25.00 BID: $24.09 ASK: $25.03 SPREAD: 0.04
Say you want to BUY 1000 shares of MSFT @ $25.02 or better. You put in a LIMIT BUY order for 25.02. (note: the current ASK for MSFT is $25.03)

TYPES OF ORDERS

STOP ORDERS : A stop order is an order that is TRIGGERED when a prespecified price is reached. Once the prespecified price is reached the order becomes a regular market order.

SELL STOPs: A SELL STOP ORDER is and order that is converted to a regular MARKET SELL ORDER when the trigger price is reached.

MSFT Current Price: $25.00 BID: $24.09 ASK: $25.03 SPREAD: 0.04

In this case if the price of MSFT falls below $20.00 then the STOP LOSS order is triggered and the stocks are sold at the then available market price. The purpose of STOP LOSS orders is to protect against sudden price drops.

TYPES OF ORDERS

BUY STOPs : A BUY STOP ORDER is a reverse of STOP LOSS ORDERs and are used for unexpected RISE in prices. BUY STOP orders are used while taking SHORT position.

MSFT Current Price: $25.00 BID: $24.09 ASK: $25.03 SPREAD: 0.04

We put in a BUY STOP ORDER at $30 on MSFT (and we hold a SHORT position on MSFT), when the price of the stock crosses $30, we start BUYING THE STOCK.

TYPES OF ORDERS

STOP LIMIT ORDERS : A stop limit order is just like stop order. However when the trigger price is reached the order is converted into the LIMIT ORDER (not market order).

So say we place a STOP LIMIT ORDER on MSFT @ $20, limit price $20. Thus if the stock price falls below $20 then the order is converted into a Limit SELL order @
$20. STOP LOSS LIMIT (<trigger price>, <limit price>)

MSFT

Current Price: $25.00 BID: $24.09 ASK: $25.03 SPREAD: 0.04

Now lets say the stock price of MSFT starts falling and reaches $20, and is continuing to drop.

Consider the following case

1. STOP ORDER (SELL, $20)

When $20 is reaches the STOP ORDER (SELL, $20) is triggered and a market order market to SELL the shares at the current market price is triggered.

Since the price of the stock is continuously falling by the time the market order actually reaches the market floor the market price of the stock may be $19.90. In this case the stocks are sold at the current market price of $19.90

MSFT

Current Price: $25.00 BID: $24.09 ASK: $25.03 SPREAD: 0.04

Now lets say the stock price of MSFT starts falling and reaches $20, and is continuing to drop

Consider the following case

2. STOP LIMIT ORDER (SELL, $20,$20)

When $20 is reaches the STOP LIMIT ORDER (SELL, $20) is triggered and a LIMIT order with specified price of $20is triggered.

Now since the price of the stock is continuously falling by the time the LIMIT order reaches the market the current market price of the stock may have fallen to $19.90.

In this case the LIMIT order will NOT execute, and stocks will not be sold. Thus we see that STOP LIMIT ORDERS may not always execute like STOP ORDERS since the market prices may be out ofthe limits

MSFT

Current Price: $25.00 BID: $24.09 ASK: $25.03 SPREAD: 0.04

Now lets say the stock price of MSFT starts falling and reaches $20, and is continuing to drop.

Consider the following case

3. No STOP orders

Lets assume the stock price continues to drop to $15.

Now if no STOP ORDERS were put then the trader would experience a loss of $25 - $15 = $10.

Putting the STOP ORDERS at $20 allows the trader to quit the downward moving trend and his losses are limited to $25 - $20 = $5.

TRAILING STOP ORDERS

A trailing stop order is a stop order where the stop price is not fixed, but trails the stock price.

For example for a BUY ORDER we can fix the TRAILING STOP ORDER to 3 points below the stock price. In this case if the stock price rises the trigger price (STOP price) will always be 3 points below the stock price. However if the price of the stock falls the trigger price remains firm at the highest point it reached.

Market Order	Limit Order	Stop Order	Stop Limit Order	Trailing Stop Order
Executed at current market price	Executed at prespecified price or better	Triggered when TRIGGER price is crossed. When trigger price is reached order is converted to MARKET Order	Just like Stop order, triggered when TRIGGER price is crossed. However when trigger price is reached order is converted to LIMIT Order	The TIGGER prices are NOT fixed prices but "trail" based on price movements.
Purpose is to obtain speed of order execution, price of the share is secondary	Purpose is to obtain a good price, speed is secondary	Used to limit losses and protect against sudden price drops	Used to limit losses and protect against sudden price drops	Used to limit losses and protect against sudden price drops, while adapting to positive market movements

Generally when a broker places an order with a dealer/specialist it is not necessary that the entire quota of order is fulfilled. Several times the order can be partially filled

AON:
An AON (all or none) order will remain at the exchange until the entire quantity is available to be executed or the order is cancelled.

Example: You transmit an AON Market BUY order for 1000 shares of XYZ and have the time in force set to DAY. The order works throughout the day, waiting to execute until the entire quantity becomes available. If this doesn't happen, the order is cancelled at the close of the market.

FOK:
FOK (Fill or Kill) order must execute as a complete order as soon as it becomes available on the market, otherwise the order is canceled.

Example: At 10:00 A M Tuesday, you transmit an order to buy 10 March04 55 calls of XYZ. You want the entire order to fill right away or be canceled. You select FOK as the time in force.

IOC:
That portion of the IOC order that, if not executed immediately after it becomes available on the market will be cancelled.

Example: At 10:00 A M Tuesday, you transmit an IOC BUY limit order for 1000 shares of stock XYZ. The order is received and becomes available for trading at 10:00:15.
Five hundred shares execute immediately at your limit price. The remainder of the order (500 shares) is cancelled.
(NOTE: The difference between FOK and IOC orders are that FOK orders have to be filled in their entirety when they hit the market (else the whole order is cancelled)

GTC:
A Good-Till-Canceled order continues to exist till it is executed or cancelled by the initiator.

GTD

GTD (good till date) is a time in force that lets you select an expiration date and time through which a submitted order will remainactive.

Touse, select GTD as the time in force. Two new fields, "Exp. Date" and "Time"will appear next to the Time in Forcefield.

Set the good 'til date using the format YYYYMMDD. Set the Time using the format HH:MM:SS. Touse a time zone other than your local zone, enter the time zone abbreviation following the date. Use EST for Eastern Standard Time, PST for Pacific Standard Time, and GMT for Greenwich Mean Time.

Example: You can define any order type as good 'til date/time using the GTD time in force. This ensures that your order will remain active up until the close of market on the date you specify, or if you also specify a time, up until the date and time you specify. When you create an order, select GTD from the Time in Force field. In the Exp. Date field that displays, you enter the date through which you want the order to work. If desired, you can also enter a specific time in theExp. Time field.

Margins

- A **margin** is an amount of a money that must be deposited with the clearing house by both buyers and sellers in a margin account in order to open a futures contract.
- It ensures performance of the terms of the contract.
- Its aim is to minimise the risk of default by either counterparty.

Margin Types

- Initial Margin - Deposit that a trader must make before trading any futures.

Usually, 10% of the contract size.

  - This margin calculation is carried out using software called - SPAN® (Standard Portfolio An alysis of Risk).
  - Initial margin requirements shall be based on 99% Value at Risk (VaR) over a one day time horizon.

- Maintenance Margin - When margin reaches a minimum maintenance level, the trader is required to bring the margin back to its initial level. The maintenance margin is generally about 75% of the initial margin.

- Variation/Special Margin - Additional margin required to bring an account up to the requiredlevel.

- Margin call – If amt in the margin A/C falls below the maintenance level, a margin call is made to fill the gap.

- **Calendar Spread margin**:
  A calendar spread position shall be granted calendar spread treatment till the expiry of t he near month contract. In case of calendar spread positions in futures contracts, exposure margin shall be levied on one third of the value of the open position of the far month futures contract.
- **Exposure margins**:
  Members shall be subject to exposure margins in addition to initial margins. The applicable exposure margin shall be:
  - **Index Futures contracts**: The exposure margin shall be 3 percent of the notional value of the futures positions, based on the last available trading price.
  - **Short Index Options contracts**: The exposure margin shall be 3 percent of the notional value of the short open positions in options on index, based on the last available closing price of the u nderlying index.
  - **Futures contracts on individual Securities**: The exposure margins shall be higher of 5 percent or 1.5 standard deviation of the notional value of gross open position in futures on individual securities in a particular underlying.
  - **Short Option contracts on individual Securities**: The exposure margins shall be higher of 5 percent or 1.5 standard deviation of the notional value of short open positions in options on individual securities based on the last available closing price of the underlying security.

- **Premium Margin**: In addition to initial margin, premium margin is charged i n the case of options contracts.
- The premium margin is paid by the buyers of the Options contracts and is e qual to the value of the options premium multiplied by the quantity of Opti ons purchased.
- **Assignment Margin:** Assignment Margin is levied on a CM in addition to SPAN margin and Premium Margin. It is levied on assigned positions of CMs towards interim and final exercise settlement obligations for option contracts on index and individual securities till the pay-in towards exercise settlement is complete.

Marking to Market

- This is the practice of periodically adjusting the margin account by adding orsubtracting funds based on changes in market value to reflect the investor's gain or loss.
- This leads to changes in margin amounts daily.
- This ensures that there are no defaults by the parties.

Categorization of stocks for imposition of margins

- The risk containment measures for the scrips shall be based on their **volatility and liquidity**.
- The scrips shall be classified into three groups' viz., stocks having traded at least 80% of the days for previous eighteen months (from July 1, 2001) would constitute Group I and Group II.
- Out of the scrips identified above, the scrips having mean impact cost of less than or equal to 1% shall be categorized under Group I and the scrips where the impact cost is more than 1%, shall be categorized under Group II.
- The remaining stocks shall be categorized under Group III.

- The impact cost shall be calculated on 15th of each month on a rolling basis considering the order book snapshots of the previous six months.
- On the basis of the calculated impact cost, the scrip shall move from one group to another group from the 1st of the next month.
- The impact cost shall be the percentage price movement caused by an order size of Rs.1 lakh from the average of the best bid and offer price in the order booksnapshot.
- The impact cost shall be calculated for both, the buy and the sell side in each order booksnapshot.
- The computation of the impact cost adopted by the Exchange shall be disseminated on the website of the Exchange.

VaR based margin

- The margin requirements for scrips in the compulsory settlement mode is determined based on a scientific model, i.e., the Value of Risk (VaR) model from June 2001.
- VaR is related to the volatility variance of the underlying stock price, but it is not a measure of volatility.
- VaR defines the maximum loss a portfolio can suffer within a time horizon (say a day) at a pre-specified probability level. For example, if a 99% VaR is specified as Rs.10, it should be interpreted as in 99 out of 100 days the loss a portfolio can suffer will never exceed Rs.10.
- It should be noted that this is not a constant thing as VaR is the maximum possible loss when the markets turn unfavourable. The maximum potential loss a portfolio can suffer when things turn unfavourable is the entire value of the portfolio itself.
- To put it in simple terms a 99% VaR will indicate the maximum loss that portfolio can suffer in 99 per cent of times. Conversely, it is the minimum loss that a portfolio can suffer in 1% worst cases.

- For the stock in Group I, the VaR will be scrip VaR (3.5 sigma) computed in a manner specified for the scrip on which stock futures are traded.
- On the stocks in Group II where the impact cost is more than 1%, the VaR margin shall be higher of scrip VaR (3.5 sigma) or three times the index VaR, and it shall be scaled up by square root of 3.
- For the stock in Group III, the VaR margin would be equal to 5 times the index VaR and scaled up by square root of 3.
- In case of securities in Trade for Trade segment (TFT segment) VaR as applicable to Group 3 (illiquid securities) shall be applicable
  - For determining the margins for Group II and Group III, the minimum index VaR would continue to be taken as 5% as at present.
  - The volatility estimates for the scrips and the index for the VaR shall be computed on the price differential of 2 days. The VaR calculated by an exchange at the end of the previous day would be used for the purpose of margin calculations for the transactions carried out on the day.

Liquidity Categorization	One-Day VaR	Scaling factor for illiquidity	VaR Margin
Liquid Securities (Group I)	Scrip VaR	1.0	Scrip VaR
Less Liquid Securities (Group II)	Higher of Scrip VaR and three times Index VaR	1.73 (square root of 3.00)	Higher of 1.73 times Scrip VaR and 5.20 times Index VaR
Illiquid Securities (Group III)	Five times Index VaR	1.73 (square root of 3.00)	8.66 times Index VaR

Extreme loss margin

- Extreme loss margin covers the expected loss in situations that go beyond those envisaged in the 99% value at risk estimates used in the VaR margin.

The Extreme Loss Margin for any stock shall be higher of:

- 5%, and
- 1.5 times the standard deviation of daily logarithmic returns of the stock price in the last six months.

- This computation is carried out at the end of each month by taking the price da ta on a rolling basis for the past six months and the resulting value shall be appl icable for the nextmonth.
- The Extreme Loss Margin is collected/ adjusted against the total liquid assets of the member on a real timebasis.
- The Extreme Loss Marginshall be collected on the gross open position of the m ember.
- The gross open position for this purpose would mean the gross of all net positi ons across all the clients of a member including his proprietary position.
- The Extreme Loss Margin so collected shall be released along with the pay-in.
- **In case of a buy transaction in cash market, VaR margins, extreme loss margin s and mark to market losses together shall not exceed the purchase value of t he transaction.**

To be read from book

- Liquid Net Worth and Exposure Limits of a Clearing Member
  - Liquid Assets
  - Bank Guarantees
  - Securities

Failure to maintain or furnish documents as prescribed under the various subsections of Section15

Maintenance of different types of Books as prescribed under SC(R)R 1957

TYPES OF RISKS

- **Interest Rate Risk** is the risk that the relative value of a security, especially a bond, will worsen due to an interest rate increase. This risk is commonly measured by the bond's duration.

- **Credit risk** is the risk of loss due to a debtor's non-payment of a loan or other line of credit (either the principal or interest (coupon) or both).

- **Liquidity risk** arises from situations in which a party interested in trading an asset cannot do it because nobody in the market wants to trade that asset.
- Liquidity risk becomes particularly important to parties who are about to hold or currently hold an asset, since it affects their ability to trade.

- **Volatility risk** in financial markets is the likelihood of fluctuations in the exchange rate of currencies. Therefore, it is a probability measure of the threat that an exchange rate movement poses to an investor's portfolio in a foreign currency.
- The volatility of the exchange rate is measured as standard deviation over a dataset of exchange rate movements.

- **Operational risk** is defined as the risk of loss resulting from inadequate or failed internal processes, people and systems, or from external events.
- Examples of Operational Risk: **Technology failure**, business premises becoming unavailable, inadequate document retention or recordkeeping, **poor management**, lack of supervision, accountability and control, **errors in financial models** and reports, **attempts to conceal losses** or make personal gains (rogue trading), third party fraud.

- **Market risk** is the risk that the value of an investment will decrease due to moves in market factors. The four standard market risk factors are:
- Equity risk, or the risk that stock prices will change.
- Interest rate risk, orthe risk that interest rates will change.
- Currency risk, or the risk that foreign exchange rates will change.
- Commodity risk, or the risk that commodity prices (i.e. grains, metals, etc.) will change.

Consequences of Currency Volatility Risk

- Reduces volume of international trade
- Reduces long term capital flows
- Increases speculation
- Increases resources absorbed in risk management
- Economic policy making becomes difficult

- **INTERNATIONAL MARKET RISKS**

- **Economic risks**
- Risk of insolvency of thebuyer
- Risk of prolonged default - the failure of the buyer to pay the amount due within six months after the duedate

- **Political risks**
- Risk of cancellation or non-renewal of export or import licences
- War risks
- Risk of expropriation or confiscation of the importer's company

- **TYPES OF BUSINESS RISKS**
- **Strategic risks** are those risks associated with operating in a particular industry. They include risks arising from**:**
- merger and acquisition activity
- changes among customers or in demand
- industry changes

- **Compliance Risk:** Compliance risks are those associated with the need to comply with laws and regulations.

- **Financial risks:** Financial risks are associated with the financial structure of your business, the transactions your business makes, and the financial systems you already have in place.

- **RISK MANAGEMENT & AVOIDANCE**

4Ways to Deal with Risk

There are four ways of dealing with, or managing, each risk that you have identified. You can:

Accept it

Transfer it

Reduce it

Eliminate it

- **Avoid Risk**

A portfolio is truly market neutral if it exhibits zero correlation with the unwanted source of risk.

Risk Management

- Insurance Policies
- Manipulating long-term, short term financialinstruments
- Adding controls andmonitors

Risk Management- PreventativeMeasures:

- Methodically identifying the risks surrounding your business activities
- Assessing the likelihood of an event occurring
- Understanding how to respond to these events
- Putting in place systems to deal with the consequences
- Monitoring the effectiveness of your risk management approaches and controls

Market Order

- A market order is an order to buy or sell a stock at the current market price.
- It signals your broker to execute the order at the best price currently available.
- But, market order cannot guarantee a specific price, as market prices keep changing.

Limit Order

- A limit order is an order to buy or sell a security at a specific price to avoid buying or selling a stock at a price higher or lower than you wanted
- You could use it when you want to set the price of the stock. In other words, you want to sell/buy particular scrip at a price other than the Current Market Price.
- However, a limit order guarantees a price but cannot guarantee execution of the trade, because the scrip might not reach the desired price on that particular trading day owing to Market related factors

Stop Loss Order

- A stop loss order is a Normal order placed with a broker to sell a security when it reaches a certain predetermined price (Trigger Price).
- Loss bearing transactions occur when market movements defy your expectations.
- The stop loss trigger price acts as a defence mechanism, like an amount that will help you sustain yourself in case of unpredictable market movements as naturally, this price cannot be more than the price of the stock you are trading.

Good-till-cancelled Orders

- These orders are orders given to your broker that hold true only during the period of the trading day for which the orders have been given.

- If the order has not been executed on that day, it will not be passed on to the next trading day.

- They are orders that are only "good until it is cancelled" or "good for the day."

Thank You