



## Proposal on Algo Trading: SEBI

**For Prelims:** Capital Market, SEBI, Algorithmic Trading, Application Programming Interface.

**For Mains:** Capital Market and its significance in Indian Economy, Laws related to Capital Markets and its regulation, Concerns related to algo trading and its significance.

### Why in News

Recently, the [Securities and Exchange Board of India \(SEBI\)](#) has issued a discussion paper on **regulating Algorithmic or Algo Trading**, or trades generated out of automatic execution and logic.

### Algo Trading

- Almost everything in the digital world is based on algorithms. Algorithms leverage **user data, behaviour and usage patterns, and take in pre-specified instructions** to achieve certain goals.
- Algo trading refers to **orders generated at superfast speed by the use of advanced mathematical models** that involve automated execution of trade.
  - Even a split-second faster access is considered capable of bringing huge gains to a trader.
- The algo trading system **automatically monitors the live stock prices and initiates an order when the given criteria are met.**
- This **frees the trader from having to monitor live stock prices** and initiate manual order placement.
- It's like **asking a broker to buy or sell shares at a specific time or at a certain price**, except that algorithmic trading is faster - computers analyse a lot more data than a human can in a given time and have less scope for error.
  - Also, significant price changes can be **avoided because orders are executed within seconds.**
  - Thus, investors can execute **more trades faster since less time is required to manually monitor, select, buy, sell, initiate** order placements and so on.

### Key Points

- **SEBI's Proposal:**
  - **Regulating Framework:** There is a **need to create a regulatory framework for algo trading.**
  - **Algo-Order:** All orders **emanating from an APIs (Application Programming Interface), should be treated as an algo order** and be subject to control by stock broker and the APIs to carry out algo trading should be tagged with the unique algo ID provided by the stock exchange granting approval for the algo.
    - An **API** is an interface that can be used to program software that interacts with an

existing application.

- **Exchange Approval:** Each algo strategy, **whether used by broker or client, has to be approved by exchange** and as is the current practice, each algo strategy has to be certified by Certified Information Systems Auditor (CISA)/ Diploma in Information System Audit (DISA) auditors.
- **Algo-ID:** Stock exchanges have to develop a system to ensure that only those algos **which are approved by the exchange and having unique algo ID** provided by the Exchange are being deployed.
- **Broker to Control Client Orders:** All algos developed by any entity **have to run on the servers of brokers wherein the broker has control of client orders**, order confirmations and margin information.
- **Authentication:** Two factor authentication should be built in every such **system which provides access to an investor for any API/algo trade.**
- **SEBI's Concern:**
  - **Risk To Market:** Unregulated and unapproved algos **pose a risk to the market and can be misused for systematic market manipulation** as well as to lure the retail investors by guaranteeing them higher returns.
  - **Identity Issue:** Currently, exchanges approve algos submitted by brokers. However, for algos deployed by retail investors using **APIs** neither the exchanges nor the brokers can identify if a trade emanating from the API link is an algo or a non-algo trade.
  - **No Redressal Mechanism:** Potential losses **in case of a failed algo strategy could be huge for retail investors** since third-party algo providers are unregulated and there is no investor grievance redressal mechanism in place.
- **Significance:**
  - **Protection of Retail Investors:** It will ensure that the **interest of retail investors is protected and it will boost investors' confidence** to undertake algo trading.
  - **Curb on Price Manipulation:** With a set of rules in place, **there won't be any price manipulations and the investors will not incur any heavy losses** in the process.
  - **Empowerment of Brokers:** Additionally, **it might be a blessing in disguise for brokers to scale up their technological prowess** and expand their clientele.
- **Market Concerns:**
  - **Makes Process Tedious:** Algo trading will deepen the **stock markets and aid retail investors who are not full-time engaged in stock trading.** However, as getting the requisite **permission from the stock exchanges is a tedious process**, brokers may have to stop using the API system.
  - **Negatively Impact Development of Market:** There's a chance that **investors might shift to some other system if API is not allowed**, putting restrictions **will impact development of the market.**

## Function of Application Programming Interface

- Many brokers in India have started providing **API** access to their clients **which establishes an online connection between a data provider (stock broker) and an end-user (client).**
- API access **enables the investors to use a third-party application that suits their feature needs or investors who have technological capabilities** to build their own front-end features.
- These third-party applications **help an investor analyse market data or back-test a trading or investment strategy.** These APIs are being used by the investors for automating their trades.
  - Presently, though the broker can identify the orders emanating from an API, **they are unable to differentiate between an algo and non-algo** order emanating from an API.

## Way Forward

- Regulations **govern and work towards eliminating any threats** to that particular market. But in doing so, it has to often **stifle innovation and keep checks in place to avoid malpractices or misuse.**
- It is essential that **regulators are well versed in the operation of algorithms and have the**

**flexibility to be able to engage** in new legislation where required.

**[Source: IE](#)**

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